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THIRTY-SIXTH ANNUAL REPORT

OF THE

BOARD OF HEALTH

OF THE

STATE OF NEW JERSEY

1912

AND

Report of the Bureau of Vital Statistics



UNION HILL, N. J.
DISPATCH PRINTING COMPANY
1913

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Letter of Transmittal.

TRENTON, N. J., October 31st, 1912.

To His Excellency Woodrow Wilson, Governor of New Jersey:

SIR—I have the honor to transmit herewith the Thirty-sixth Annual Report of the Board of Health of the State of New Jersey, and the Report of the Bureau of Vital Statistics.

Very respectfully,

BRUCE S. KEATOR,
Secretary.

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Board of Health of the State of New Jersey.

MEMBERS.

JOHN H. CAPSTICK, President ..... Montville.
BRUCE S. KEATOR, M.D., Secretary ..... Asbury Park.
WILLIAM H. CHEW ..... Salem.
HERBERT W. JOHNSON ..... Haddonfield.
RICHARD C. NEWTON, M.D. ..... Montclair.
JACOB C. PRICE, M.D. ..... Branchville.

The offices of the Board are in the State House, Trenton.

ORGANIZATION OF THE STATE DEPARTMENT OF HEALTH.

With the organization of the State Board of Health in 1908, five working divisions were established, viz., Division of Vital Statistics, Division of Medical and Sanitary Inspection, Division of Food and Drugs, Division of Creameries and Dairies and Division of Sewerage and Water Supplies.

The complete personnel of the department is as follows:
Bruce S. Keator, M.D., Secretary and Executive Officer.
A. Clark Hunt, M.D., Assistant Secretary.
Charles J. Merrell, Chief Clerk.
Edmund R. Outcault, Clerk and Stenographer.

DIVISION OF VITAL STATISTICS.

David S. South, State Registrar and Chief.
Walter R. Scott, Assistant to the Chief.
Albert J. Shull, Clerk.
Mrs. E. C. Closson, Clerk.
Miss K. M. Vare, Clerk and Tabulator.
Miss E. S. Merrell, Clerk and Stenographer.

DIVISION OF MEDICAL AND SANITARY INSPECTION.

A. Clark Hunt, M.D., Chief.
David C. Bowen, Sanitary Inspector.
Wallace T. Eakins, Sanitary Inspector.
William H. MacDonald, Sanitary Inspector.
Millard Knowlton, M.D., Tuberculosis Inspector.
George A. Huntley, Mechanician.
S. Elizabeth Wilkes, Clerk and Stenographer.
Harold S. Dugan, Clerk and Stenographer.

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DIVISION OF FOOD AND DRUGS.

R. B. Fitz-Randolph, Chief of Division and Director of the State Laboratory of Hygiene.
William G. Tice, Assistant to the Chief.
John V. Mulcahy, Bacteriologist.
Henry W. Denny, Chemist.
Howard B. Warren, Chemist.
Christopher L. Devitt, Chemist.
John E. Bacon, Asst. Chemist.
William S. Townsend, Inspector.
Louis Tremallo, Inspector.
Isaac H. Shaw, Slaughter-house Inspector.
Walter W. Scofield, Jr., Assistant.
Frank Yates, Clerk and Stenographer.
Anita A. Stephan, Clerk and Stenographer.
Joseph A. Moran, Laboratory Assistant.
Antoinette Foy, Laboratory Assistant.
E. H. Parsons, Capt. oyster inspection boat.

DIVISION OF CREAMERIES AND DAIRIES.

George W. McGuire, Chief.
A. I. Goehrig, Assistant to the Chief.
S. S. Vandruff, Inspector.
Frederick C. Robertson, M.D., Inspector.
Samuel DeCou, Inspector.
Miss Florence Derbyshire, Clerk.

DIVISION OF SEWERAGE AND WATER SUPPLIES.

Francis E. Daniels, Chief.
George T. Palmer, Assistant.
Chester G. Wigley, Assistant Sanitary Engineer.
Joseph J. Newman, Assistant Chemist.
Harry P. Letton, Field Assistant.
William J. Orchard, Field Assistant.
Clarence W. Sparmaker, Inspector.
Fred B. Worman, Inspector.
Charles B. Robinson, Inspector.
Norman A. Keeler, Inspector.
Charles A. Macdonald, Jr., Clerk and Stenographer.
Harry F. Kemler, Clerk and Stenographer.
Hattie C. Mahlow, Clerk and Stenographer.
Francis F. Cox, Clerk and Stenographer.

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Report of the Secretary.

BRUCE S. KEATOR, M.D.

To the Board of Health of the State of New Jersey:

GENTLEMEN—Herewith is presented the annual report of the Board for the year ending October 31, 1912.

The rapid increase in the amount of work accomplished by the several divisions of the Board has made it necessary to condense the annual report as much as possible. A brief outline of matters of importance is all that is attempted.

Weekly meetings of the Board and also many hearings and conferences in various portions of the State have been held. The arrangement of the divisions of the Board has been somewhat changed since our last report. In the original plan, the laboratory for the examination of samples of water and sewage was under the supervision of the Chief of the Division of Sewerage and Water Supplies. After a thorough trial of this arrangement, it was found that laboratory work of this character should be directed by one having special training in the interpretation of the results of analyses, and that the laboratory should be conducted as a part of the general Laboratory of Hygiene. This plan was carried out, and Mr. R. B. Fitz-Randolph, Director of the Laboratory of Hygiene, was made chief of a division which included the former Division of Sewerage and Water Supplies. The Board believes that this arrangement will tend to increased efficiency and a saving in the total amount of moneys expended under the former arrangement.

The work of the various divisions has been satisfactory and we believe that the progress of the year is apparent and directed along the right lines of effort.

Special attention is directed to the increasing number of localities in which sewage disposal and water filtration plants have been

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installed, to the rules and regulations governing the canning of fruits and vegetables, together with the special investigation of canning factories; to the increased number of cities which are being assisted by the investigations of dairies made by the State Board of Health in an effort to secure purer and cleaner milk supplies. Of special note also are the epidemiological inquiries which were made, resulting frequently in the finding of the direct cause of an epidemic and, by the removal of the cause, lessening the number of cases.

The tubercular exhibit which during this year was shown in many places has been of great educational value, and should in the future be enlarged into a permanent health exhibit.

As the Secretary of the Board is the Superintendent of Vital Statistics, the report of statistical work for the year ending December 31, 1911, is herewith submitted. A summary of the work performed by each division is first presented, followed by the report of the Board on the execution of the various laws relating to health. The complete report of each division is then presented and finally the full report on the vital statistics collected during the year.

DIVISION OF MEDICAL AND SANITARY INSPECTION.

This division has a closer relation to the actual prevention of disease than the other divisions of the Board, in that a larger portion of the duties consigned to it by law consist in the investigation of epidemics and advising with local boards of health as to methods of disease prevention which, if adopted, result directly in the control and prevention of disease.

The work of the other divisions is of inestimable importance, in that through these channels the local conditions are improved and the general protection of the public is increased. Through the Division of Food and Drugs the public is protected against the sale of impure foods and drugs. The Division of Creameries and Dairies serves by its co-operation with local boards of health to protect the public against the danger due to the consumption of impure milk. The Division of Sewerage and Water Supplies, backed by efficient laws, is able to secure pure water for the

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various localities of the State and prevent the disposal of waste from becoming a danger to public health. From the Bureau of Vital Statistics a knowledge is gathered of local mortality rates which, directing attention to local conditions, leads to an investigation of the cause of high death rates in certain localities and to the general betterment of local sanitary conditions. Indirectly, then, each division has its useful relation to public health problems, but when preventable diseases occur in any locality of the State, the Division of Medical and Sanitary Inspection deals directly with the situation.

No effective work can be accomplished by the division unless reports of the existence of communicable disease in each locality of the State are promptly and accurately made to the State Board of Health.

For a number of years, working under an unsatisfactory law, these reports were incomplete and unreliable. In 1910 a law was enacted by the Legislature which is a great improvement over former laws on this subject and, as the experience of eighteen months ending October 31, 1912, shows, has proven effective and satisfactory. Whereas, in the years of 1910 and 1911 the average number of cases of communicable diseases reported to the board was 13,000, in the year ending October 31, 1912, 19,078 cases were reported.

In the reporting of tuberculosis the number of cases reported indicates that within a short time accurate statistics as to the number of cases existing in our State will be available.

The division was charged with the expending of $10,000 on an educational campaign for the prevention of tuberculosis. The tuberculosis exhibit within a period of nine months was open for 106 days in nineteen localities and over 100,000 persons were in attendance upon it. During the exhibitions over 140 lectures were delivered, 406 moving picture reels shown and 5,729 stereopticon views were thrown on the screen. Plans for the coming year are already perfected looking to continuing and improving the exhibition and the prospects for a successful year are encouraging.

In epidemiological work the year has been a remarkable one in that in the investigation of four epidemics the source of the disease was definitely determined and by proper procedure the limitation of the outbreaks resulted. In the separate report of

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the division will be found full detailed reports of these epidemics together with a review of work which has been accomplished.

DIVISION OF CREAMERIES AND DAIRIES.

A review of the work of this Division shows that the plan of dairy inspection heretofore adopted has been followed this year, and that the system of co-operating with local boards of health in the investigation of their milk supplies has been very successfully carried out.

As the beneficial results of our inspections in certain localities become apparent, applications reach us from adjoining communities for the scoring of the dairies supplying them, and in this way the milk supplies of thirty-seven towns have been supervised during the past year.

Toward the end of the fiscal year an application was received from the Board of Commissioners of Atlantic City for an inspection of the dairies supplying milk to that municipality, and a list of some six hundred dairies was forwarded us for that purpose. This work will be undertaken, but with the present limited number of inspectors, it will not be possible to extend the work in other directions until more men are provided.

During the past year some of our cities were compelled to send their own inspectors to the sources of the supplies both in and out of the State, in order to meet the demand of the public for full protection against polluted milk. This shows a commendable activity in sanitary affairs. There is no doubt, however, that the State alone should supervise the sanitary condition of dairies and be required to furnish each municipality with records showing whether these dairies are capable of producing clean milk, and furnishing all other details having a bearing upon the wholesomeness of the product. By this plan a system of uniformity in scoring is secured, and a duplication of the work of the State and municipal authorities is avoided.

This would leave municipalities free to confine their efforts to the investigation of the milk supplies within their own limits, including the collection of samples for bacteriological analyses, and the handling of milk in shops, restaurants, etc., and would insure a greater thoroughness of supervision than where there is

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a division of authority. Of course this perfected system cannot be established until the State Board is provided with sufficient help to do the work more thoroughly.

A matter claiming the attention of the Board during the year was the fact that milk was being sold under the name of "certified milk" which did not meet the requirements of the law nor of the American Association of Medical Milk Commissions in respect to the labeling of the containers.

Since the value of "certified milk" as a food for infants depends largely upon its freshness, the provision of the law requiring the date of the production to be printed upon the seal of the container is a wise precaution and should be insisted upon. Chapter 237 of the laws of 1909 provides that this shall be done, but the power to enforce the act is not given to this Board nor is there any penalty fixed for its violation. We recommend that the law be changed to meet this defect in its terms.

During the past year the officers of this Division made some 4,062 inspections of premises where milk is either produced, handled for sale or manufactured into food. This is an increase of 960 over the number of such inspections made last year. Included in the 4,062 inspections are those made of 77 retail milk depots located in cities. In some of these places, the milk was exposed to contaminating influences, and it took considerable time of the officers to bring about the proper conditions necessary to insure its safety. Since the purity of the milk supply should vitally concern the community in which it is consumed, it is suggested that all local boards of health adopt ordinances governing the handling of milk in milk shops, and strictly enforce them within their respective jurisdictions.

Four hundred and sixty-two establishments where ice cream is manufactured were inspected by officers of the Division this year. These include larger factories as well as the places where a few quarts are made for sale at soda fountains, and by street vendors, which latter class consume much of the time of the inspectors. It would be of great assistance to this department if local health officers were to devote some of their time to compelling sanitary regulations in these small factories, the product of which is sold exclusively within their jurisdictions.

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DIVISION OF SEWERAGE AND WATER SUPPLIES.

The amount of work done in the Division of Sewerage and Water Supplies during the year ending October 31, 1912, shows how active that Department has been in public health matters.

There have been made 391 sewerage system inspections, including the complete investigation of 16 proposed sewer systems. Plans for 31 proposed sewage treatment works have been investigated and approved, making a total approval of 108 sewerage propositions. Eleven propositions upon investigation were found faulty and were disapproved.

In 1908 there were 39 sewage disposal plants while at the present time there are 114 plants in operation, and 17 under construction. Several of these are practically completed and will be in operation very soon. Some of the disposal plants are being enlarged or rebuilt to meet present demands, due to growth of population.

These works have required a good deal of attention to keep them in shape. In some cases on account of the overload it has been impossible to produce good results, and those plants are in bad condition. In other cases results are fair, while at many places good results are obtained. Many of the plant attendants are taking considerable interest in the process of sewage disposal and are now making daily tests on the effluents of the beds, to determine whether or not the output is up to standard.

The disposal plants which have been approved during the year range in capacity from a 10,000 gallon per 24 hours creamery plant to a 20,000,000 gallon per 24 hours joint disposal plant for 3 large municipalities.

Of these places 16 have been on account of being ordered to purify the sewage while 15 have been constructed or are being contemplated without any order whatsoever. There have been 91 applications for extensions to existing sewer systems, and permission has been granted to build sewer extensions in 25 municipalities.

Considerable work has been done towards eliminating the minor pollutions of streams. There have been reported 1,618 new pollutions from private properties.

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Of pollutions previously reported, 1,841 reinspections have been made, of which 876 cases were found abated. To the Attorney-General were referred 168 cases for prosecution, while on account of particular reasons in each case the remainder were held for some future action.

There are regularly employed, only four inspectors to patrol the entire State. During two months of the summer, however, two temporary inspectors were employed. On account of conditions in some localities a great deal of ground has to be covered before pollutions are discovered, and much time is often consumed in testing out with dye. Considering the fact that about one-fourth of each man's time is spent in collecting samples from public water supplies the above record is very creditable.

Water systems for 10 towns and plans for 4 municipal water filtration plants have been approved while a total of 26 water supply plans have been acted upon. The filtration plant for Bridgeton is a modern and up-to-date installation, having a capacity of 3,000,000 gallons daily. The largest equipment is that for the City of Trenton, which will be capable of filtering 30,000,000 gallons per 24 hours.

The 202 water companies, or departments, now furnishing water, have received no little attention, and as a result some of the filtration plants have been greatly improved. Of the whole population of th eState, 83%, or over 2,000,000 people, are being supplied with water from public supplies.

The 43 untreated surface supplies have been gone over and cleaned up, and 357 special inspections of water supplies and watersheds have been made. The supplies are getting more and more subject to pollution, and greater care and supervision is needed. The need of some form of treatment is being realized more and more, and 10 installations for the treatment of water with calcium hypochlorite have been made during the past year. Some treat raw water alone and some are used in conjunction with filters. There are now 20 of these plants in the State, and the result of this treatment on the water supply of the City of Trenton illustrates its usefulness. The process is only to eliminate bacteria, and is not a substitute for filtration.

The 20 filtered surface supplies have been carefully watched, although there have been instances where raw and polluted water

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has been by-passed directly into the distribution system. A new law now provides a penalty of $100.00 for each offense of this kind. Careful tests of the plants have in several cases been made and improvements have resulted therefrom.

Of the ground waters, 12 are filtered for the removal of iron. These have needed very little attention as the process is simple and the waters in other respects are of good quality.

The untreated ground water supplies have not needed very much attention, although from time to time suspicious analyses have caused investigations which led to the discovery of bad leaks letting in surface contamination.

There have been made inspections of 25 supplies of bottled waters sold in New Jersey, and approval has been given to 7 new supplies during the past year. These waters are derived from springs or driven wells, and are nearly all located in New Jersey or Pennsylvania.

A very important part of the work of this Division is that done in the laboratory. Quarterly analyses on all public water supplies are required by law, and analyses of filtered waters are made monthly.

In 1908 there were analyzed 670 samples of water and sewage while in 1912 there were analyzed 3,169 samples of water and sewage, of which 1,676 samples were from public supplies. These analyses consisted for the most part of both chemical and bacterial analyses.

Included in the above are the analysis of 626 samples from private supplies, 34 samples from proposed public supplies, 44 samples from bottled water supplies, 56 samples from State Institution supplies, 32 samples from dairy supplies, 308 samples from miscellaneous sources, and 393 samples from sewage effluents.

DIVISION OF FOOD AND DRUGS.

This division enforces the Food and Drug Act of 1907 and the Oleomargarine, Cold Storage, Shellfish, Slaughter House and Sanitary Food Laws. It also exercises a systematic supervision over canning factories, grocery stores, meat markets and other places of a similar character.

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The inspectors of this Department have covered practically the entire State, visiting the larger cities and towns several times. The inspections made have included within their scope the existing sanitary condition of food producing establishments, as well as the methods of manufacture, the ingredients entering the finished products, the character of foods and the labeling used by the manufacturer and the distributors. A careful investigation of the canning factories in the State has shown a decided improvement in most of the places and a disposition on the part of the canner to obey the law and comply with the rules of the Board. During the year all of the cold storage warehouses have been inspected one of more times and the sanitary conditions found to be uniformly good. Considerable care is taken by the warehousemen to keep their places clean and to carry out the provisions of the Cold Storage Act. Better sanitary conditions have been insisted upon in those buildings where animals are slaughtered for sale for human food. Windows have been screened, hog pens removed and the offal hauled away. In most cases cement floors have been installed, the sidewalls faced with impervious material and better drainage provided. In other instances new abattoirs have been built in which slaughtering is done with all the conveniences of a modern plant. Realizing the importance of properly supervising the oyster industry of the State, the last Legislature appropriated a sufficient sum of money to enable the Board to purchase a suitable boat to be used for the purpose of making oyster investigations. Since August of this year, when the boat went into commission, the Division of Food and Drugs has been actively engaged in a careful study of the oysters grown in Cumberland and Atlantic Counties. The work has included an examination of the water, oysters floated and unfloated, and a sanitary survey of the oyster beds. A detailed account can be found in the report of the Division of Foods and Drugs.

During the year 5,996 samples of foods and drugs have been analyzed, of this number 843 were either adulterated by reason of the addition or substitution of inferior materials, misbranded or mislabeled. This is equivalent to a percentage of 14.05. In enforcing the Food and Drug Act it has been found that while the great majority of dealers appreciate the necessity for the law and do all they can to comply with it, there are others who deal

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in adulterated foods and drugs and operate their stores and factories in violation of all sanitary requirements.

CANNING OF FRUITS AND VEGETABLES.

This industry has a relation not only to the preparation of foods but also to the agricultural and manufacturing interests of our State. Were it not that a greater portion of the vegetables and fruits produced in our State are canned and preserved for use at seasons of the year other than those in which they become marketable, the farming interests of our State would suffer an incalculable loss.

The supplying of machinery and cans for use in canning factories fosters other industries and thus has an economic bearing on the maintenance and advance of the industrial prominence which our State has reached. The industry also furnishes employment for large numbers of persons living near the canneries for whom there is little permanent employment, and who, without this temporary employment would be idle during the entire year.

The more recent facts which follow are obtained from statistics of the year 1911, and give some idea of the extent and value of this industry. In 1911, thirty-four canning factories were in operation in New Jersey. During that year 111,467,368 pounds of fruits were packed and 57,521,688 pounds of vegetables. The increase of the amounts packed in 1911 over those packed in 1910 was 98 per cent. The capital invested in the industry in 1911 amounted to $837,064, and the selling value of the product was $2,173,567.

Of those employed in the canning factories of the State, 1,917 were males and 2,851 females; making a total of 4,766 persons. While these statistics show conclusively the value of the industry from an economical standpoint, there is another question involved which is of particular interest, and that is as to what supervision there may be of the sanitary arrangement of factories in which fruits and vegetables are canned, and the cleanliness of employes and of the various processes which are used. In short, howis the public protected from short-weight cans and improper and unclean processes of manufacture. Under authority contained in section 31 of chapter 217, laws fo 1907, and section 11 of chapter 231, laws of

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1909, the State Board of Health may adopt rules and regulations to secure the purity of foods and drugs. Thorough inspection has been made of the factories engaged in canning tomatoes, and before deciding upon definite rules governing these factories, several conferences were held with the packers, and valuable information was obtained relating to the conduct of the business.

After careful consideration, the Board finally, on April 29, 1912, adopted the rules and regulations which follow. While these rules apply particularly to the canning of tomatoes, the rules from 11-21, inclusive, deal with sanitary topics and are applicable to all canning factories.

1. The manufacture of canned goods, and particularly of pulp, paste, catsup or soup stock from wholly or partly unsound materials is prohibited.

2. Materials which are rejected as unsound in any process incident to the preparation of foods for canning will be regarded as decomposed within the meaning of Section 3, Chapter 217 of the Laws of 1907.

3. All tomatoes intended to be used in the manufacture of pulp, paste, catsup or soup stock shall be thoroughly sorted, and all unsound material removed before the final washing; and the sound stock, after sorting, shall be thoroughly washed in clean water before pulping.

4. If trimmings and peelings from tomatoes are to be used in the manufacture of pulp, paste, catsup or soup stock, such tomatoes must be treated in the manner laid down in Rule 3. Pulp, paste, catsup or soup stock when made from trimmings or peelings will be regarded as misbranded unless so labelled.

5. Tomatoes intended to be used for canning purposes may be sorted and the unsound portions, skins and cores removed after washing and scalding, provided the trimmings are not used in the manufacture of food products.

6. Tomato pulp, paste, catsup and soup stock will be held to be adulterated under the provisions of Section 3, Chapter 217 of the Laws of 1907, unless they comply with the tentative standards in use by the U. S. Department of Agriculture, which are as follows:

Moulds, present in not more than 25% of fields at 90 diameters.

Yeast and spores, not more than 25 per 1/60 cubic millimeter.

Bacteria, not more than 25,000,000 per cubic centimeter.

7. In the manufacture of pulp, paste, soup stock and catsup from tomatoes, adequate facilities and machinery must be provided to handle the product expeditiously and in a cleanly manner.

8. Canned goods manufactured from dried fruits or vegetables which have been subjected to a preliminary soaking will be held to be misbranded, unless the label bears the word "SOAKED", or an equivalent term, in plainly legible letters conspicuously placed. This rule shall not apply to the packing of marrow beans, pea beans or kidney beans, packed with or without pork or tomato sauce.

9. Tomatoes labelled "Fancy", "Superfine", "Finest Quality", "Extra Choice", or with other expressions of like nature, will be held to be of the quality described as "Fancy" defined below; and will be held to be misbranded if they do not conform to that definition, or to the quality generally described by the trade by that name.

All goods below the quality of "Standard" as defined below, or goods containing undue amounts of skins, cores, unripe tomatoes or other evidences

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of careless packing or inferior materials, or goods made from overripe tomatoes, or goods having a disagreeable or unusual odor will be classed as "Seconds", and will be held to be misbranded unless the word "Seconds," or some similar expression intelligible to the retail purchaser is plainly and conspicuously printed on the label.

The following method of examination of canned tomatoes has been tentatively adopted by the State Board of Health and will be used in the examination of the 1912 pack.

The amount of solid matter in canned tomatoes is to be determined by draining the contents of the can on a flat sieve made of No. 18 wire, and having four meshes to the linear inch and an area of not less than 50 square inches, for two minutes. Six cans to constitute a sample and the results obtained by examining each can separately averaged.

The six cans referred to in the foregoing paragraph will be collected by Inspectors of the Board at the canning factories during the present year.

For the purpose of grading canned tomatoes the following definitions have been tentatively adopted and will be used in judging the quality of the 1912 pack, due consideration being given to the seasonal conditions and the methods of packing found at the factories from which the samples are taken.

"Fancy"—Made from well-selected, ripe tomatoes, a large proportion of which are whole. No. 3 can. Gross weight at least 38 ounces; solids, at least 20 ounces.

"Extra Standard"—Made from ripe, sound tomatoes. No. 3 can. Gross weight, at least 38 ounces; solids, at least 20 ounces.

"Standard"—Made from sound, average ripe tomatoes; not necessarily all red.

No. 2 can—Gross weight, at least 23 ounces; solids, at least 12 ounces.

No. 3 can—Gross weight, at least 37 ounces; solids at least 19 ounces.

No. 10 can—Gross weight, at least 110 ounces; solids at least 64 ounces.

Canned tomatoes offered for sale in this State after November 1, 1912, will be deemed to be adulterated, if upon examination they show the presence of added water or pulp.

10. All canned goods must be solidly packed; that is, all cans must be filled as full of the material being packed as can be done without injuring its quality or appearance; and if the use of water, brine or syrup is necessary, no more shall be used than is required to fill the spaces between the material being packed when the cans are solidly filled in the manner above described.

This rule shall not apply to the canning of soups.

11. Adequately equipped wash rooms, and places where employees may change their clothing, must be provided for male and female employees. These wash rooms must be separate and apart from any room where manufacturing or storage of food products is carried on; they must be provided with sufficient water, soap and clean towels.

12. Adequate toilet facilities must be provided for male and female employees. If possible, these toilets should be provided with flush closets and urinals. If running water cannot be had in the toilets, well-constructed earth closets are recommended. If open privy vaults are used they must not be located in close proximity to buildings in which foods are prepared, and they must be thoroughly screened to prevent the entrance and exit of flies. All toilets must be kept clean at all times.

13. Persons operating canning factories must compel their employees to wash their hands before beginning work and after visiting the toilet.

14. Waste materials must not be permitted to accumulate around buildings, but must be removed daily.

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15. Rooms in which manufacturing is carried on must be provided with smooth, water-tight floors which can be properly cleansed, and such floors must be cleansed daily.

16. Adequate drainage must be provided to lead all waste liquids outside the building.

17. Employees must be cleanly in their habits and must provide themselves with suitable garments which can be kept clean.

18. No employee with infected wounds in the hands or arms shall be permitted to hande food products or the containers in which they are placed, before such containers are sealed or capped. Clean cuts which are not infected shall be covered with rubber cots securely fastened.

19. The use of barrels or other containers which cannot be properly cleaned and sterilized will not be permitted for the storage of pulp, paste or soup stock.

20. An abstract of the rules and regulations of the State Board of Health shall be posted in a conspicuous place in each room where food is manufactured, handled or stored. If persons are employed who do not understand the English language, suitable translations of so much of the regulations as affect the operatives shall also be posted in languages with which they are familiar, such translations to be furnished by the State Board of Health upon application.

21. Swells and other spoiled canned goods may be returned to canners by jobbers and retailers for purposes of inspection only. Under no circumstances will the reprocessing, relabelling or sale of canned goods which show evidences of fermentation or spoilage be permitted.

22. These rules shall take effect July 1, 1912.

SUPERVISION OF THE OYSTER INDUSTRY.

Few persons in our State realize the extent of the oyster industry or have considered the necessity of its careful supervision by State health authorities. As with milk supplies, the public has been accustomed to take the oyster as a food on faith, and has shown little tendency to secure definite knowledge as to the conditions under which it is propagated or to ascertain what measures are provided to protect the consumer from disease due to infected oysters.

However, as in the case of milk, the public has been enlightened during very recent years and there is now a demand for scientific investigation of all conditions which may have a deleterious effect upon the oyster as used for food purposes. Epidemics of typhoid fever directly traceable to infected oysters have sounded the alarm and bureaus of health in States in which oysters are propagated are called upon to secure the passage of laws which will grant ample protection to the oyster consumers.

The industry in New Jersey representing as it does a value of between four and five millions of dollars, should be conserved if at

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the same time the consumer is protected. The first duty of the State Board of Health is to protect the consumer, and with this in view bills have been introduced in the Legislature and enacted into laws which have enabled the Board to make exhaustive inquiries and to adopt rules and regulations which, if followed, will be of lasting benefit.

Under the law (chapter 24, laws of 1912), the oyster beds are examined, and for this purpose a boat is provided so that the total area in which oysters are cultivated may be covered. The boat is equipped with an outfit for making chemical and bacteriological investigations and one of the bacteriologists of the Laboratory force is detailed to live upon the boat and make the examinations of oysters and the waters in which they are propagated.

As a further protection, the streams in which oysters are grown or floated are carefully inspected for the purpose of removing any sources of pollution. In addition to the protective measures above detailed, a plan for excluding infected matter from individual cases of typhoid fever occurring upon the water shed has been adopted. A law is upon our statute books requiring the reporting of all cases of communicable diseases to the State Board of Health. When a case of typhoid is reported as existing upon a water shed a representative of the Board is required to investigate the case for the purpose of ascertaining whether the discharges of the patient are properly disposed of and to direct that such disposal shall preclude the possibility of stream infection.

We believe that with this thorough oversight of the industry, it will be possible to maintain it without endangering the public.

Before the adoption and passage of rules and regulations governing the industry by the Board, many problems were presented and several conferences were held. The care of excreta on the hundred of boats engaged in the traffic was one of these problems, and with the co-operation of the oystermen we believe this will be solved. The marked improvement which is evident upon an inspection of the oyster houses and wharves, the cleanliness of the bags in which oysters are shipped, the removal of sources of pollution along streams in which oysters are propagated, give evidence of the effectiveness of the work already accomplished.

The rules of the Board, adopted 1912, are herewith given:

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1. Oysters or clams which are taken from waters found upon inspection by the State Board of Health to be so polluted as to render the oysters taken therefrom or placed therein dangerous to health shall not be distributed or sold for use as food within the State of New Jersey.

2. The floating, laying out or storing of oysters intended for use as food will not be permitted in water of a less salt content than that in which oysters will naturally grow to maturity.

3. Oysters will not be permitted to remain on floats longer than twenty-four hours during the first fifteen days of September; nor more than thirty-six hours from September 15th to November 1st. During the other shipping months oysters will not be allowed to remain on floats longer than forty-eight hours, except by permission of the State Board of Health. Oysters will frequently cleanse themselves in one tide and therefore the offering for sale, as food, oysters that bear evidence of over-floating or soaking is prohibited.

4. Oysters that have been subjected to the floating process shall not be permitted to remain in scows, on wharfs or in shipping houses before shipment longer than forty-eight hours except in cold weather and then only if they are properly protected from freezing.

5. All floats, scows, or other vessels, used for transportation of oysters, or clams, shall at all times be kept clean and free from mud, refuse, or any decaying matter.

6. Oysters that have been subjected to the floating process when shipped must have the sacks, barrels or other containers so marked that the purchaser may know that they have been floated. This marking shall be in the following words: "This package contains Floated Oysters" and the type shall occupy a space of at least three-fourths of an inch in height. The marking must be so stamped or printed on the tags that it can be easily discernible. No sacks that have been used for the trans-shipment of oysters shall be used again for that purpose until they have been thoroughly cleaned and sterilized. Wooden barrels or other containers must be clean and free from anything that might contaminate the oysters.

7. The practice of allowing oysters that have been dredged from the planting grounds to remain on the decks of schooners for a considerable time before sale results in their deterioration as a food product; therefore oysters shall not be carried on the decks of vessels after dredging longer than twenty-four hours in September, forty-eight hours in October, and one week in November.

8. Railroad cars in which oysters are shipped in sacks must be clean and free from anything that might endanger the purity or healthfulness of the product. All cars shall be subjected to proper inspection to see that they conform to this rule.

9. Oysters that are shucked may be washed in clean water before shipping and must be packed for shipment in containers in which ice shall be used, but the ice or the water therefrom must not be allowed to come in direct contact with the oysters.

10. Oysters or clams intended for sale as food must not be kept or stored in any place or places which may in any way affect their purity or wholesomeness.

11. Oyster and clam shippers will be required to keep their boats, wharves and shipping houses in a clean and sanitary condition at all times.

12. Owners of all vessels in which men work continuously for more than two hours and which are engaged in the handling of oysters or clams from the planting grounds or in the vicinity of floats upon which oysters are or may be laid out, must provide their vessels with suitable receptacles in which the excreta, both solids and liquid, of persons using such boats shall be re-

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ceived, and the contents of such receptacles shall be disposed of either by incineration or by burial in the ground at points sufficiently removed from the banks of streams to prevent pollution of the waters thereof.

13. Oysters or clams that have remained in storage until the product has become weakened will be regarded as unfit for food and cannot be shipped.

The violation of any of these rules or regulations is punishable by a fine of $100.00 as provided in Section 8 of Chapter 24 of the Laws of 1912. These rules shall become effective immediately, provided, however, that no penalties shall be collected for violation of rule 12 until after November 15th, 1912.

EXPOSURE OF FOODS.

With the co-operation of local boards of health, the State Board is conducting an active campaign against the exposure of foods to flies, dust and other deleterious matter. Prior to the passage of the revised laws on food and drugs in 1907, and the subsequent Sanitary Act of 1909, local boards of health could, under the general health laws of 1887, pass ordinances regulating the sale of foods and drugs, but the method of procedure was only partially effective.

The progress made under the many recent laws has resulted in a great improvement of previous conditions. One of the first steps taken by this Board was to direct attention to the exposure of candies with no covering or protection from flies and dust on the various news-stands maintained at railroad stations. As a result of this action, all candies were covered with separate wrappers or protected by screens indicating a realization of the fact that there was not only a legal reason for such action, but also that the general public would no longer tolerate the sale of confectionery which was unclean by reason of exposure to flies and dust. Many local boards of health have adopted ordinances covering the subject.

The law regulating the sale of food and drugs, Chapter 217, section 31, laws of 1907, empowers the State Board of Health generally to adopt, carry out and enforce such rules and regulations as shall promote the purposes of the act. What is known as the Sanitary Act, Chapter 231, section 11, laws of 1909, reads as follows:

"The State Board of Health shall make uniform rules and regulations for the carrying out of the provisions of this act, which said rules and regulations shall apply to all boards and per-

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sons entrusted with the enforcement of the provisions of this act." Under the authority contained in these sections the State Board of Health at a regular meeting, held June 25, 1912, adopted the following rules:

Rule 1. Fruits, vegetables, meats and other food products shall not be displayed or exposed on the sidewalk, or outside of places of business, unless such foods are securely covered by cases of glass, wood or metal, or unless they are enclosed in tight barrels, bags or boxes. *Provided, however*, that this rule shall not apply to fruits or vegetables which must necessarily be peeled before use, but such foods, when displayed outdoors, must be supported on platforms at least eighteen inches above the surface of the sidewalk or ground.

Rule 2. Prepared foodstuffs, such as bakers' goods, confectionery, shelled nuts, etc.; dried fruits, such as dates, figs, peaches, prunes, apricots, etc.; cereal products, such as tapioca, breakfast foods, etc.; pickled products, such as pickles, chili sauce, etc.; fruit products, such as apple butter, jellies, jams, etc.; meat products, such as dried or smoked fish, veal loaf, pickled pigs' feet, chipped beef, boiled ham, mince-meat or other foods prepared for eating, or subject to the attacks of worms or flies, shall not be displayed for sale unless protected from flies, dust and dirt and all other foreign and injurious contamination by suitable coverings of glass, wood or metal.

CEMETERIES.

It is unlawful in our State to locate any new cemetery or burying ground or to enlarge any cemetery or burying ground without the consent and approval of the municipal authorities and the board of health of the district in which it is proposed to locate or enlarge such cemetery.

In cases where the municipal and local board of health authorities refuse to grant permission to locate cemeteries, the person making the application may within thirty days after such refusal apply to the State Board of Health, and this Board is given the power to reverse the decision of the local authorities and to grant the application.

Wherever the local authorities grant the application and the location of the cemetery is deemed objectionable by the inhabitants of the city, township, or borough in which it is proposed to locate, ten chosen freeholders may within thirty days after the granting of the permit apply to the State Board of Health for a reversal of the decision of the local authorities and request that said location or enlargement of a cemetery be prohibited.

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All persons making application for the location or enlargement of any cemetery are required to file a descriptive map of the premises they propose to occupy with the local authorities, and a copy of this map is, in turn, filed in the office of the State Board of Health.

During the year ending October 31, 1912, three applications were made to the State Board of Health for a reversal of the decisions of local authorities in granting permission for the location of cemeteries. Two of these cemeteries were located in Woodbridge Township, Middlesex county; one known as the Magyar Reformed Church Cemetery and the other as the Ruthenian Greek Catholic Church Cemetery. In these cases the appeal was made on the ground that the properties upon which these cemeteries were located were unfit for burial purposes and the establishment of the cemeteries would lessen the value of the properties in the localities. While the consideration of the location of these cemeteries was before the local authorities, burials were made by parties interested in the location of the cemeteries, who were unaware of the fact that such burials were made in violation of the law.

A hearing was granted all interested parties by the State Board of Health and an inspection of the proposed cemeteries by a representative of the Board was made. After all the evidence in reference to the matter was before the Board, the appeal to the Board from the decision of the local authorities granting the location of the cemeteries was denied.

The third application which was received was an appeal made for a cemetery which was to be located in Roseland, Essex County, N. J., the applicants desiring that the decision of the local authorities against the location of the cemetery be reversed and they be permitted to establish a cemetery in that locality. The Board decided to sustain the original decision of the local authorities and the appeal was not granted.

COMMON DRINKING CUP.

In the report of last year this subject was discussed at length and attention directed to the need of some provision on the part of the railroads and common carriers for supplying individual drinking cups on trains and boats. The first opposition to the

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law which developed after its passage was due to the inconvenience caused by the lack of cups for drinking purposes when the passengers had no knowledge of the existence of the law and, therefore, failed to provide themselves with cups. The law has been sharply assailed on the ground that it is a needless interference with personal rights and that the evidences of the transmission of disease by the common drinking cup are unverified.

Within a few years several instances haye been noted which we believe will show to the strongest opponents of the law the absolute necessity of such a law from every view point.

One of the representatives of this Board while travelling on a railroad train noted that a family of children were afflicted with whooping-cough. As the children had spasmodic atacks, after each attack had passed they would go to the water cooler and take a drink from the glass which was used in common by all the passengers. After this had been repeated several times the inspector took occasion to go to the cooler, and holding the glass to the light found that it was smeared with infected mucous from the mouths of these children.

In another case, a negro, who was travelling on one of the railroad trains within the state, frequently went to the cooler for the purpose of obtaining a glass of water. It was evident that he was having a high fever, and there were some slight evidences of eruption on his face. The following morning he was detected by a local health officer in one of the cities of the State and sent to the small-pox hospital. He, therefore, during the period of the onset of the disease was using a cup on a train from which others were drinking.

Another illustration is that which occurred in one of our cities. A man, who was suffering from one of the most loathsome diseases to which the race is subject, went to the office of a physician for the purpose of having mucous patches which had appeared upon his throat treated. After the treatment he went from the doctor's office directly to a public fountain in the public square and used the cup attached to the fountain by a chain. Standing beside him, awaiting their turn to drink from the same cup, were two children. The physician noting the incident asked the children if they would not prefer a glass of soda water, and in this way kept them from using the cup. He then proceeded to take the

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cup from the fountain and since that time the public drinking cup in that city has been abandoned.

Illustrations such as these point very clearly to the reasonability and necessity of the law. In our last report we considered the necessity of the passage of a law by the Legislature which would require common carriers to provide individual drinking cups for the use of passengers. A law of this character is no longer necessary, as the question of whether the railways and common carriers were, under the law, required to furnish individual drinking cups was passed upon by the Public Utilities Commissioners of the State, the complaint being that there was a lack of adequate and proper facilities upon the lines of the several railroad corporations operating in the state for the use of drinking water by passengers upon the trains of said companies.

The decision of the Commissioners on this matter is as follows:

"Following the enactment of Chapter 171, P. L. 1911, which prohibited the use of "common drinking cups" in public places in this State, complaint was made to this Board that no facilities for the use of drinking water were provided upon the railroad trains operating in this State.

Upon this complaint a hearing was had, notice of which was given to the railroad companies interested.

Upon such hearing, the Board finds and determines that the several railroad companies operating within the State of New Jersey, which do not provide facilities for the use of drinking water by passengers upon the passenger cars of the trains operated by them, on which water is furnished for drinking purposes, fail to furnish adequate and proper service.

It appears that in the State of New Jersey, and in other States where similar statutes are in force, the companies have, in some instances, endeavored to meet the situation by installing in passenger cars devices through which, at nominal expense, individual cups may be obtained; and that in at least one instance, without the State of New Jersey, the situation has been met by providing the trains with inexpensive paper cups, which may be obtained from conductors, brakemen or porters, without cost, by request of any passenger.

The latter practice commends itself to the Board.

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It meets the requirements of the statute, and, at the same time provides, in the respect under consideration, adequate and proper service.

The Board, therefore, ORDERS the following railroad companies (Here follows a list of all railroad companies in New Jersey) to provide and keep on all passenger trains operated by them, respectively, within the State of New Jersey, on which water is furnished for drinking purposes, inexpensive individual drinking cups, or glasses in sanitary condition, that may be had by any passenger, without cost to such passenger, solely for the purpose of drinking water on such trains, on request made to the conductor or brakeman of a train, or to the porter of any car thereof.

This order shall take effect January 1st, 1912.

Entered December 5th, 1911."

MARITIME QUARANTINE—PORT OF PERTH AMBOY.

The State Board of Health is, under the provisions of special acts, given supervision over the entry of vessels, at the several ports of entry within our State. The Port of Perth Amboy is one to which more vessels come than to any other in the State. Dr. G. W. Fithian is the appointed Health Officer of this Port and the following facts are gleaned from his report for the year ending October 31, 1912. It is the purpose of the service at this Port to guard against the introduction of diseases into the State of New Jersey, through the Port of Perth Amboy, by maritime vessels or maritime traffic.

Ranking in amount of Custom receipts and value of cargoes, the Port of Perth Amboy is the sixth largest port of entry along the Atlantic Seaboard. It is exceeded only by the Ports of Springfield, Boston, New York, Philadelphia and Baltimore. Situated as it is, close to the overcrowded Port of New York, it is destined to continue in its yearly increase in trade. The annual report of the Custom House of the Port of Perth Amboy for the fiscal year ending June 30, 1912, shows custom receipts of over one-half million dollars, and the value of cargoes entered through this Custom House during the same period of time was twenty-one million dollars.

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The Steamship Companies and manufacturers realizing the importance of a clean "bill of health" in facilitating the handling of this amount of business, there has been no difficulty in obtaining their co-operation in the examination into the sanitary condition of one hundred and thirty-five (135) vessels, and of their crews and cargoes.

This is an increase of twenty-one (21) vessels over the preceding year. Seventy-seven (77) of these were vessels from foreign ports and fifty-eight (58) coastwise. Ninety-two (92) were steamships and forty-three (43) sailing vessels. The total amount of money received for the examination of vessels during the year was $512.75.

On the sixth day of July, 1912, a notice was received throughout the United States Public Health and Marine Hospital Service that plague existed in Havana, and notice received on July 7th from Surgeon General Blue urged conference of local health officials in reference to the collection, examination and destruction of rats. On July 8th, 1912, a conference of Dr. J. L. Lund, Health Officer of the city of Perth Amboy, Dr .C. W. Naulty, Jr., Acting Surgeon in command United States Quarantine Port of Perth Amboy, and Dr. G. W. Fithian, Health Officer Port of Perth Amboy, was held and line of action outlined.

At a conference of Dr. A. Clark Hunt of the State Board of Health, C. W. Naulty, Jr., of United States Quarantine, and G. W. Fithian, Health Officer Port of Perth Amboy, held July 12th, a petition to present to the Board of Health of the city of Perth Amboy was prepared and presented to that Board, which met in special session July 12th, and adopted the following resolution:

Whereas, we are in receipt of a communication from Dr. Charles W. Naulty, Jr., Acting Surgeon in command United States Quarantine Port of Perth Amboy, Dr. George W. Fithian, Health Officer of tht Port of Perth Amboy, and Dr. John L. Lund, Health Officer of the city of Perth Amboy, in regard to the bubonic plague now existing in other ports and since vessels from these ports enter our harbor, therefore be it

Resolved, That stringent measures be taken to ward off this contagious disease and thereby keep our city out of the zone of the bubonic plague, and be it further

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Resolved, That a petition be forwarded to the governing body of this city to make an appropriation of $250 to meet the expenses incurred in preventing the disease entering our city.

An appropriation of two hundred and fifty ($250) dollars was made at the next meeting of the Board of Aldermen of the city of Perth Amboy.

Numerous conferences were held with the local health authorities in outlining the campaign of rat destruction, and the Acting Surgeon in command United States Quarantine Port of Perth Amboy, was enthusiastic in his desire to assist in this campaign, but the campaign of rat extermination was not carried out. The final disposition of the matter is shown in the following motion introduced and passed at a special meeting of the Board of Health held August 20, 1912:

Motion, that as factories do not show their desire to co-operate with the Board of Health, and as the City appropriation is not in any way large enough to start this work of rat extermination, and as the Board of Health had done all in its power, be it resolved, that the money left from the appropriation of two hundred and fifty dollars ($250) be returned to the City and the work dropped.

In guarding against the introduction of plague, the following rules, as adopted by the State Board of Health, were put in force:

1. All vessels must breast off at least six feet from the dock.
2. All lines leading from vessels to dock or lighters must be freshly tarred and must be equipped with inverted cone rat guards.
3. All gangways must be lifted from vessels when not in use.
4. Wherever practicable vessels shall not be unloaded during night time.

Assistance was rendered the United States Quarantine Service in the fumigation of twenty-four (24) vessels from infected ports. One hundred and twenty-one (121) rats in all were destroyed. None of these showed any gross lesions of plague.

August 9th, 1912, the Steamship Meriddia arrived from Tampico with nine members of the crew sick with malaria, and one stowaway was found to be suffering with axillary abscess. There being no evidence of plague or other quarantinable disease, the vessel was allowed to proceed to dock and given permission to land cargo.

August 15, 1912, Steamship Ashfield from Bridgeton, Barbadoes, via Guonoco, Venezuela, arrived with eight sick and one

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death en route. The ship's log showed that the dead member of the crew had been buried at sea. Vessel was held at quarantine for seventeen hours for observation. During this time she was fumigated throughout with the destruction of eigtheen rats. There being no gross lesions of plague found on the dead rats, the sick members of crew, found to be suffering with tropical malaria, and the clinical history of the man who died at sea being indicative of tropical malaria, the vessel was discharged from quarantine, and granted free pratique.

October 12, 1912, the Steamship Ashfield, Santiago de Cuba, via Guonoco, arrived with five sick with malaria. Vessel was allowed to proceed.

ANNUAL CONFERENCE OF STATE AND LOCAL BOARDS OF HEALTH.

Prior to 1908, two conferences of State and local boards of health were held. A special act of the Legislature authorized the State Board of Health to call such conferences each year, and the earlier conferences, although instructive, seemed to cover in discussion the same subjects and have the same objectives as the meetings of the long established and successful State Sanitary Association. The plan was, therefore, adopted of holding the conference and the Sanitary Association meeting jointly, and this plan was given a thorough trial, with the result that health officers throughout the State felt that too much attention was given to more general questions of sanitation and too little to the administration work of local boards of health.

In 1911, the Health Officers' Association of New Jersey took definite form, and the State Board of Health determined that the time had come for a return to the plan of a separate conference of State and local boards of health, and such a conference was called on January 17 and 18, 1912. The meeting was well attended and the papers presented were interesting and instructive. Such widely known authorities as Prof. William T. Sedgwick, of the Massachusetts Institute of Technology, Frederick L. Hoffman, Statistician of the Prudential Insurance Company of New Jersey, Dr. William H. Allen, Director of the Bureau of Municipal Research of New York, were among those who addressed the Asso-

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ciation, together with representatives of the State and local boards of health.

The interest shown in the meeting was a matter for congratulation, and each year an effort will be made to have presented papers on subjects relating to sanitation and to stimulate local boards of health to increased activity. The assistance rendered by the Health Officers' Association was appreciable and the active co-operation of the Association served to lessen the labors of the State Board in planning for the conference. We anticipate another successful meeting of the conference in January, 1912.

A circular showing a full report of the conference of 1912, including all papers, addresses and discussions presented at the conference, was issued by this Board, and a limited number of copies of the circular are still available for distribution.

MEDICAL MILK COMMISSIONS.

The agitation aiming to secure milk of suitable quality and purity for the use of physicians in the feeding of infants, and in hospitals for the use of patients, had as one of its earlier advocates Dr. Henry L. Coit of New Jersey, who deemed the subject of such importance that in 1889 the State Medical Society was requested to take some definite action looking to the education of the public and the appointment of a commission to aid in the effort to secure milk of this grade.

It soon became apparent that something more than legislation was necessary in order to raise the quality of milk to meet the requirements of physicians for their work in the sick-room, in hospitals and in the nursery. Out of this need, realized at that time by those who were responsible for the agitation, grew the Medical Milk Commission.

The responsibility for the appointment and the work of the Commission was placed upon a representative medical society. The Commission thus appointed, while a permanent body, was yet amenable to the medical society. The Commission, unpaid, was expected to establish a medical control over methods employed in selected dairies found to be able to fulfill the demands of physicians for milk of a grade in quality and purity suitable for clinical purposes.

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As the working plan of the Medical Milk Commission is of interest to all sanitarians we present an outline of it.

The plan consists of a contract control including the Commission's supervision of methods which it shall prescribe in its contract. The Commission also designates for employment by the dairymen four expert officers for investigation through four lines of inquiry, namely: Chemical analysis of the product, bacteriological investigations, veterinary inspections and medical examinations of employees. By these means, it is designed to safeguard the product and the public and to insure the highest possible attainment of standards in purity and quality for milk.

The plan having been successful in Essex County, New Jersey, in 1893, other Commissions were appointed in other sections. The development of the Commission was slow at first. After twelve years, there were but fourteen such Commissions in existence.

By a federation of these Commissions in 1906 and by the extension of the propaganda for Certified Milk, there are at the present time between sixty and seventy Medical Milk Commissions in the United States with several organized in other countries.

This Association of Commissions is designed for its educational influence upon the profession and public with reference to pure milk and to promote the organization of Medical Milk Commissions where no milk crusade has yet been started. This educational work is carried on by the publication and circulation of literature on the pure milk movement and by the organization of public exhibits in large centers of population to foster popular interest in pure milk.

The history of such exhibitions held in Baltimore, Cincinnati, Pittsburg and in Philadelphia, show distinctly how useful these agencies are in educating the public and bringing into line all the working elements in a community with reference to pure milk.

The Philadelphia milk show was visited by about one hundred thousand people during the week of its continuance and the Committee in charge organized a program of popular lectures delivered in connection with it which were attended by thousands of citizens.

The milk show was the result of the fact that the Association holds its annual meetings in different cities throughout the country and it was thought best to illustrate the marvelous educational

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influence which this agency would exert upon the communities in which the meetings were held.

The American Association of Medical Milk Commissions has definitely fixed the standards for Certified Milk and the methods for its production and the various state laws now in force protect the work of the Medical Milk Commission and place the responsibility of fixing such standards upon this Association.

The following is a concrete definition of Certified Milk:

"Milk from a lower animal which has been certified by a Medical Milk Commission appointed by a medical society, which certification is the monthly authorization for the commercial use of the term and which certificate is based upon the Commission's investigations relative to the production of the milk showing that it conforms to the standards of quality and purity for Certified Milk and the methods and regulations for the production of Certified Milk; which standards of quality consist of a fresh milk, unchanged by either heat or cold, less than twenty-four hours old when sold and which contains not less than 12% of total solids, with not less than 3.5 nor more than 5.5% of fat, to which has not been added any other food principle, chemical substance or preservative, which standards of purity for the milk consist of the lowest possible bacterial and dust-dropping content, consistent with the highest possible practice of dairy hygiene, provided that the average numerical bacterial contamination is not above an average weekly count of 10,000 bacteria per cubic centimeter and from which milk every known method has been employed to exclude pathogenic micro-organism and which standards of purity are safeguarded by a medical guarantee of the health and personal hygiene of every employee handling the milk and by a veterinary guarantee that the milk herd will not be a carrier of any disease to those using the milk for food; which methods and regulations for the production of Certified Milk are carried on in conformity with those adopted by the American Association of Medical Milk Commissions and are changed from time to time as the action of this Association modifies the technique for the attainment of the standards of quality and purity for Certified Milk growing out of improved methods and regulations for its production."

MOSQUITO EXTERMINATION.

To the late Professor John B. Smith of the New Jersey State Agricultural College more than to any one person is due the advanced legislation which, we believe, will in time result in lessening the number of mosquitoes bred in our State, thus adding to the comfort and health of its citizens.

Year after year concentrating his energy on public lectures, educating people to the necessity of some regulating laws on the subject of mosquito extermination, pointing out practical methods of securing almost certain relief from the annoying and disease

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transmitting insect, and in appealing to legislature after legislature showing the immediate necessity for the appropriation of sufficient funds to carry out his plans, his efforts were finally realized and a large appropriation being granted the ditching of salt meadows was begun on an extensive scale. For a short time the effect of the lessening of mosquito breeding areas resulted in some parts of the State in a reduction in the number of mosquitoes. As time passed, however, it was apparent that the ditches became clogged by grasses and the driving of wagons over them, so that instead of accomplishing results which were intended they became breeding places for mosquitoes and were rendered more than useless.

During the legislative session of 1912, a law—Chapter 104, laws of 1912—was enacted which was intended to make provision for more clearly defined supervision over mosquito breeding areas. Under the provisions of this act, the justice of the Supreme Court in each county in the State was empowered to appoint a commission consisting of three persons. This board of commissioners was to be known as County Mosquito Extermination Commission. The commissioners are required to serve without compensation and are only paid for necessary expenses. The Director of the State Experiment Station is made a member ex-officio of each one of the commissions and shall co-operate with them for the effective carrying out of plans of work. The Director is required to serve without compensation and is also required to furnish commissioners with survey maps and information and advice for the prosecution of their work.

The law gave each commission the power to eliminate all breeding places of mosquitoes within the county wherein it is appointed, and to carry out all plans which in its opinion may be necessary and proper for the elimination of breeding places of mosquitoes and which will tend to exterminate mosquitoes within said county.

The monies which are to be expended by the commission are raised by the county board of chosen freeholders of each county having charge of the finances of the county, and the amount so raised is based upon the assessed valuation of the county. Where the assessed valuation of the county is not more than twenty-five million dollars, a sum not greater than one mill on every dollar of assessed valuation may be raised. In counties where the valua-

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tions are not more than fifty million dollars, a sum not more than one-half of one mill on each dollar of assessed valuations may be raised. In counties in which the assessed valuations are in excess of fifty million dollars, a sum of not more than one-fourth of one mill on one dollar of assessed valuation may be raised. The monies thus raised are required to be paid from time to time to the mosquito commissions on requistion made by the commissions.

A report is made by every commission on the first day of November of each year and submitted to the Director of the State Experiment Station.

When the act was signed, only a few days remained within which application could be made to the board of chosen freeholders in many of the counties in the State for providing for the expenses of the commissions in the annual budgets.

In only three counties were the appropriations made for this purpose. An outline of the work which has been done in Essex county is somewhat of an indication of the effectiveness of the law and is a guide to the other counties which in the coming year expect to have ample monies given to the various commissions which have already been appointed. Chief Justice Gummere appointed five members of the mosquito extermination commission of Essex County, and Ralph Hudson Hunt, M. D., was selected as president of the Board. On account of the lack of funds, the commission was unable to begin operations until May 13 and by this time the county was suffering from mosquitoes which had bred on the salt marshes. The County was divided into 43 districts, and an inspector placed in charge of each one. This inspector was directly responsible to his chief for the mosquito breeding therein.

This force was managed by a Chief Inspector, and assistant Chief Inspector and two Deputy Chief Inspectors.

One inspector devoted his time during the summer to salt marsh ditching.

The oiling of sewer and catch basins was in charge of a foreman. A force of laborers averaging about thirty-two was employed throughout the season.

The inspectors were required to cover their entire territory once every ten days in hot weather, and in fifteen days when the weather was cooler, and were assisted by laborers when necessary. Many large swamps have been drained and rendered safe from

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mosquito breeding in Newark, Irvington, East Orange, Nutley, Belleville, Bloomfield, Glen Ridge and South Orange.

The total of breeding places turned in by the field staff encountered in the house to house inspection conveys some idea of the nature of the work done by these inspectors. Barrels and tubs, 8,326; water in cellars, 135; pools, 358; cess pools, 668; other receptacles, 8,093; cisterns, 1,156; wells, 1,472; roof gutters, 28; manure piles, 1,527; catch basins, 6,962.

The extermination of Culex Pipiens, the common house mosquito, presented a different problem from that involved in the eliminating of salt-marsh mosquitoes. This required a continuous and thorough house to house inspection and a thorough examination of every square yard of territory. The results of this work were beyond the expectations of the Commission. During the winter months, when there is no breeding of mosquitoes, the Commission will endeavor to permanently abate breeding places throughout the county. This will be accomplished by the filling up with ashes, or other material, depressions in land where mosquitoes were known to breed, and by ditching of swampy areas.

As for the salt marsh, the entire area is laid out in ten acre plots so that the work there may be thoroughly systematized and rendered more easy of close inspection in breeding season. Maps have been prepared of the entire county upon which are located all the known breeding spots in the county.

The co-operation of the local boards of health contributed in a large way to the sucessful issue of the campaign.

As a result of the work done by the Commission, the county was more free from mosuqitoes than ever before, this being indicated by the marked lessening demand for mosquito netting and bars, also by the marked decrease in the sale of oil of citronella. The newspapers also noted the fact in numerous editorials, and articles published throughout the summer.

It appears that the work during the past year has absolutely justified both the labor and expense involved and the plan is to prosecute the work to a more successful issue during the years to follow.

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ASSOCIATION OF HEALTH OFFICERS OF NEW JERSEY.

The annual report of this Board, while giving information upon the actual work of the Board, should, we believe, direct attention to evidences of progress in the organized effort to promote health. Last year the Health Officers' Association of New Jersey was formed and it immediately became a moving force in the interests of more effective State and local administration of health laws. An outline of this organization showing its objects and plans for usefulness has been prepared by its Secretary, and selections from this report are herewith presented as an incentive for the formation of similar organizations in other States.

The Health Officers' Association of New Jersey, now well into its second year, has surpassed all expectations of its founders and taken a unique and important place in the sanitary organization of the State. To the State Board of Health particularly the Association bears a close relationship, and it is a noteworthy fact that it had its origin in a movement among local health officials to obtain closer co-operation between State and local boards of health through the annual conference of those bodies which is described elsewhere in these pages.

Out of a temporary organization the Association was crystallized by its constitution adopted May 24, 1911, into a permanent body aiming at "the advancement of knowledge relating to public health and sanitation and the encouragement of social intercourse among health board officials." From the outset the latter object has been kept in view quite as much as the former; its attainment has fully justified the prophecy of the first President of the Association, Chester H. Wells, that as much benefit will be derived from the social feature of the meetings and from the co-operation that will result from knowing fellow health officers as from any other feature. The meetings are well attended by both members and employes of the State Board of Health, and there is thus afforded an excellent opportunity to meet these representatives of the State Board, with which we all have more or less official business. Without an organization of this kind many health officials never had an opportunity of knowing the men with whom they correspond at Trenton.

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"Since a noted and honored organization, the New Jersey Sanitary Association, has for many years operated in this State for the advancement of public health science and organization, it is well to state that the Health Officers' Association is in no sense a rival. While the aims of both Associations are essentially the same, the spheres of membership and the methods adopted are so different that rivalry is out of the question. The Sanitary Association and every other organization for the promotion of the health of the State will receive the hearty support of this Association.

"The title of the Association may perhaps at first sight be misleading. The legal definition of the term 'health officer' would indicate that only a small number of persons are eligible. The Constitution, however, provides for the following large classes of membership.

1. MEMBERS, to which class are eligible:
   a. Licensed employees of local boards of health, or those who hold the same position with a local board of health that they held at the time of the passage of the act that requires employees of local boards to be licensed.
   b. Employees of the State Board of Health.

2. ASSOCIATE MEMBERS, to which class are eligible:
   a. Members of local boards of health.
   b. Members of the State Board of Health.
   c. Persons not in the employ of a local board but who in the past have held positions which would make them eligible as "Members."

"It is thus seen that the Health Officers' Association is intended to include in its membership all persons who are engaged in health board work; that is, all officers of health. The name was chosen as being one that well expressed the character of the membership without being too cumbersome.

"The management of the Association, it was felt by the founders, should be left entirely in the hands of those who are actively engaged in health board work, and for this reason Associate Members, while otherwise sharing in all privileges, may not vote or hold office. This class of members may, however, exert a very great influence through discussion and committee work.

"Over 400 men are eligible as active members and over 2,000 as associates, —figures which give some idea of the possibilities of influence and progress of an association of this kind.

"Five regular meetings a year are held, in the months of September, November, January (annual meeting), March and May; and in different parts of the State, so as to meet the convenience of all sanitary districts.

"During the past year there have been taken up for discussion the special subjects of Milk Regulation, Food Regulation in general, Infant Mortality, and Tuberculosis. At the time of the January meeting members availed themselves of the opportunity to share in and contribute to the Annual Conference arranged by the State Board of Health. The speakers who addressed the Association on the special subjects during the year were Dr. John J. Cronin, Dr. Livingston Farrand, and Dr. C. E. North, all of New York City, and Dr. Millard Knowlton, Tuberculosis Inspector of the New Jersey State Board of Health.

"Most important of the Association's activities is without question the committee work. Committees on Law and Legislation, Vital Statistics, Standard Annual Reports, Standard Ordinances, and Prevention of Rabies are constantly receiving the instructions of the Association and working them into tangible and effective form.

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"The Committee on Standard Annual Reports has been in correspondence with a similar committee in Massachusetts and has made a general inquiry into methods of reporting; as a result of which study it expects to formulate in the near future a detailed plan which will serve as a reliable guide to every local health officer in the composition of the annual report. Such a plan will simplify the labor of accounting and reporting in those places which now publish reports, and will make these of much more comparative value; at the same time places which do not now publish reports will be aided to do so concisely and effectively.

"The Standard Ordinance Committee has entered into co-operation with the State Board of Health in the collation of local ordinances from the various communities of the State and the perparation of simple and legal model ordinances which may be recommended for adoption by local boards of health.

"The outlook for the future usefulness of the Association, aside from the important social aspect which has already been mentioned, appears to lie in three main directions.

"First, in co-operation with the State Board of Health. Such co-operation may well be broad and inclusive in character. Not only is the consensus of opinion of local health boards and their officers expressed through the Association, but its committees also are constantly considering subjects which intimately concern State and local boards of health in their reciprocal relationships. Here is an opportunity for effective co-operation in obtaining more nearly uniform and more effective sanitary organization, legislation, and administration throughout the State.

"Again, there are large opportunities for co-operation in popular education and publicity work. Such work is now recognized as securing many results which penalties and prosecutions fail of. There are now, especially among the health officers of small places, many men having limited opportunities for the study of their profession who would profit by published information coming from other officials and from the State Board of Health. In all publicity work the Association stands ready to assist, and in the event of the publication of a periodical State health bulletin the full co-operation of the Association in making it a success may be counted upon.

"Secondly, the Association will tend strongly to raise the standard of the profession of public health in the State. Its mere membership requirements exert such an effect supporting as they do the licensing system for local sanitary officers. Furthermore, through the discussions and committee work of the Association that knowledge which is essential to effective sanitary administration will be actively promoted.

"Lastly, the existence of such a professional organization is certain to heighten the dignity of health board work and to gain for it an increased public appreciation,—an appreciation which must eventually result in greater attention to sanitary matters on the part of municipalities and increased appropriations for health boards."

RECENT LAWS RELATING TO PUBLIC HEALTH.

Laws for the protection of health and the prevention of disease have from year to year been presented to the legislature of the State. The early laws on these subjects were somewhat crude, and it was not until the early eighties that public opinion became so aroused on these subjects as to lead to a definite legislative policy, and since that time many such laws have been enacted.

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The fundamental health law of 1887 was drafted by able lawyers and physicians of the State, and having stood the test of time and legal assault, today may be considered a practical and useful law. The demand for increasing numbers of laws on health matters is created by varying local conditions; such as the increase of population, the vast industrial interests of the State and many other factors which are apparent to anyone giving the subject consideration.

From 1907 to 1912 fifty-three health laws were enacted.

Some of the laws relating to health which are at present on the statute books are contradictory and others are impracticable. There is need, therefore, for a complete revision of many laws, and by the combination of laws a lessening of the volume of laws on health. Each year there are introduced into the legislature bills which are obstructive, retrogressive or improper and which would, if enacted as laws, result in confusion and remove some of the barriers to the protection of health which have been constructed by good legislation. It has been the policy of the State Board of Health to oppose legislation which is retrogressive and to further legislation which is beneficial. Members of the legislature have relied upon the judgment of the Board as to the laws which should be enacted. The committees on public health in the Senate and Assembly usually refer all laws on health topics to the Board for its approval or disapproval. By this method laws which are as progressive as those of any State have been enacted and powers have been granted to the State Board of Health and to the local boards of health which enable them to deal intelligently with any matter having a direct effect upon public health.

During the legislative session of 1912 several laws were introduced having for their object a change from the present method of local health administration by the local boards of health in each sanitary district in the State to the formation of county boards of health; such boards to have power over the counties of the State, thereby eliminating local boards of health. These measures met with decided opposition and the opposition in itself was conclusive evidence of the favorable estimate of the people of the State of the present method of formation of local boards of health.

We herewith submit a short resume of the laws pertaining to health which were enacted during the legislative session of 1912,

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and believe that these laws show a decided progress in the character of legislation and indicate that our legislative bodies are in favor of conferring upon the State and local boards of health larger powers.

HOSPITALS FOR THE CARE AND TREATMENT OF TUBERCULOSIS.

The efforts of those interested in the study and prevention of tuberculosis have for years been directed to the education of the masses in regard to the methods to be adopted for the care and treatment of tuberculosis in the home and the prevention of its spread. Clinics for the purpose of discovering cases of the disease in its early stages have been of great service and many hospitals have been erected for incipient cases. One of the greatest problems, however, which has presented itself has been that of dealing with advanced cases of the disease. These are the cases which are really the most serious menace to persons who are compelled to reside in places in which the tuberculosis patients live and to those who are brought in close contact with them in the home, factory or workshop. There has never been proper recognition by State authorities of the responsibility which rests upon them to in some way deal with this great problem of advanced cases of the disease. It was not supposed that any laws would take into consideration the fact that these people were, as insane people are, dangerous to the communities in which they live. But during the legislative session of 1912, a bill was introduced into the Senate which had for its object not only the providing of suitable places for the care of persons in the advanced stages of the disease, but had also in it the provision of partial payment by the State for the care and maintenance of those who were indigent or who only could provide a portion of the money necessary for their board and medical treatment.

We believe that this law, original as it is in its method of dealing with cases of consumption, by providing as it does for State subvention and the commitment of persons to hospitals when such persons are an intentional menace to others, will in time result in a lessening of cases of this disease. The law (Chapter 217, Laws of 1912) requires that boards of chosen freeholders in the

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various counties of the State shall establish county hospitals in every county, for the care and treatment of persons suffering from this disease known as tuberculosis. Power is given the board to purchase or lease property for this purpose and erect necessary buildings or to improve or alter existing buildings.

These plans for buildings when prepared by boards of chosen freeholders are presented to the State Board of Health for approval. The power is given the board of freeholders under the act to raise the sums of money which are necessary for this purpose. After the building is erected, a board of managers is appointed, and this board has entire charge of the management of the institution.

Any person in the county, suffering from tuberculosis, may make application for admission to this institution. A careful inquiry is required as to the ability of the person to pay, and if it is found that the individual or his relatives can pay a certain proportion of the expense of his maintenance and medical treatment they are required to do so. If, however, the patient cannot pay, the county is required to support the patient and the State furnishes aid to the amount of three dollars per week for each patient.

The provision of the law, however, which has attracted most attention and which is considered an especially advanced step in legislation regarding tuberculosis is that which requires that persons who fail to carry out certain definite rules and regulations which may be laid down by the State Board of Health may be committed to the county hospital by any Judge of the Court of Common Pleas upon proof of services by the officer of certain rules and regulations and proof of violation thereafter. The Court may also make such order for the payment for care and treatment as may be proper. After commitment such person may be discharged by the said court at any time when said court thinks it proper so to do. The individual, therefore, who will not carry out the simple rules which are necessary to protect those living about him is no longer allowed to remain in his home, but may be removed to an institution. It will be noted that the law applies to all classes and conditions of citizens. However, among the better classes of people, who have some idea of cleanliness, it will seldom be necessary to commit an individual to the county tuberculosis hospital because of failure to obey the rules and regulations. In the more crowded

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districts, in the tenement houses, and among the ignorant, there are those who have very little knowledge of care for personal cleanliness. The application of the law will be most beneficial as it is by these people that the disease is chiefly distributed.

Since the enactment of the law it is of interest to those who are following its operations and who are desirous of ascertaining how effective it will be to learn what has been done in the various counties of the State toward carrying out its provisions. There are now in this State, county hospitals in the following counties: Essex, Hudson and Union. In Mercer County, as permitted by the law, the county board of chosen freeholders are planning to provide for the care of public patients in the various hospitals in Trenton. The County of Cape May has already filed plans for approval for the construction of a hospital. In Morris County the plans for the construction of a hospital have been approved. Plans for the construction of a hospital in Burlington County are under advisement, and Monmouth Committee has a committee appointed by the board of freeholders, to prepare plans. It is, therefore, evident that the law already has accomplished even more than was expected within so short a period of time, and we believe that, before another year has passed, at least, twelve or fifteen of the larger counties of the State will be provided with adequate buildings for the care of tuberculous patients in county hospitals.

The question has arisen in many of the counties as to whether it was possible for the board of chosen freeholders to take care of these patients in the almshouses by setting aside a portion of the building for this purpose. The State Board of Health has taken the position that this is not a satisfactory arrangement, and the Assistant Attorney General has rendered an opinion upon this subject. He states in his opinion that the intention of the law evidently is to provide a separate building for the care of cases of this nature, and the very fact that such a law was created would indicate that persons suffering from tuberculosis could not be cared for in buildings which were used for the care of those who were well or suffering from other forms of disease.

There is some doubt as to what action will be taken by the State in regard to one provision of the law, which requires that the State shall aid, to the amount of three dollars per week, in the support of each patient. It has been absolutely impossible up to the

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present time to get a basis upon which to estimate the number of cases that may apply for admission or be committed to be maintained in the various county hospitals. Until some definite knowledge of the number of cases is secured, it is difficult for the State Legislative Appropriation Committee to set aside the amount of money required for this purpose.

We hope, however, that within a year or so the statistics obtained in the various counties will give us some definite knowledge upon which to base the amount of appropriations which will be required.

MARRIAGE LICENSE LAW.

The marriage license law which was further amended at the last session of the legislature is showing splendid results in preventing runaway marriages, and the figures showing the total number of marriages for the present year are nearer what they should be than for a number of years past.

The most important amendment to the license law which was enacted last winter was the clause prohibiting justices of the peace from performing the marriage ceremony, and a further amendment providing that 24 hours must elapse from the time the license is issued until the ceremony is performed.

Both of these changes in the law were recommended because of the great number of violations of the marriage law by justices of the peace who it seems failed to realize that the relation of marriage has to do with the fundamental interests of society, because its conditions concern national existence and national permanency. Instead, however, a great number of justices seemed only to consider the fees derived from performing the marriage ceremony, taking little care to inquire or acquaint themselves with the fact as to whether the parties applying to be married were legally or morally fit to be mated.

The amendment requiring a lapse of 24 hours was found to be necessary for the reason that it was very little trouble for runaway couples from other states to come to New Jersey, procure a marriage license, have the ceremony performed, and return to their own state within a few hours, and it is hoped that the 24 hour clause will prevent such hasty marriages.

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When the marriage license law was first suggested by this department, it was not expected that the legislature would consider a drastic measure such as would place the ceremony of marriage in this state upon the highest possible plane, however, since the enactment of the original law, and the success of the same, the legislature has each year made amendments improving the law, and it is hoped the act will be still further perfected.

INDUSTRIAL DISEASES.

By an act of the legislature of 1912 (Chapter 351) every physician who is in attendance upon a person suffering from poisoning by lead, phosphorus, arsenic or mercury, or their compounds, or from anthrax, or from compressed-air illness, contracted as a result of such person's occupation of employment, is now required to send a report directly to the State Board of Health, and upon failure so to do the physician incurs a liability to a penalty of twenty-five dollars. When these reports are received by the State Board of Health they are transmitted to the Commissioner of Labor of the State.

The law was introduced by the Federation of Labor and its intention is to direct attention to the conditions in the various manufactories of the State which may cause the diseases which are required to be reported. It will also lead to a study of improved methods of protection of the factory employees from the contraction of this class of diseases.

MENTAL DEFICIENCY AND EPILEPSY.

No definite statistics as to the total number of persons within our State who are afflicted with mental deficiency or epilepsy are at the present time obtainable.

Last year persons who were interested in the collection of such statistics and who had in view the necessity for more careful study of each individual case of mental deficiency or epilepsy had introduced into the legislature an act covering this subject (Chapter 182, Laws of 1912.) Under the provisions of this act, physicians

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are required to report to the secretary or clerk of local boards of health each case of mental deficiency or epilepsy coming under their professional supervision. These reports are forwarded by the local board of health to the State Board of Health. The State Board of Health is required to forward a summary of these reports to the State Commissioner of Charities and Corrections. It is apparent that the State Board of Health merely acts as a receiver and transmitter of these reports. We believe that in the future this work should be transferred to the Commissioner of Charities and Corrections, and that some person should be deputized by that department to visit and study each case of mental deficiency and epilepsy which is reported.

SALE OF SKIMMED MILK.

In order to prevent deception in the sale of skimmed milk a law was passed in 1912 (Chapter 138) which requires that every person who sells, or offers or exposes for sale, or has in his possession for sale, any milk or condensed milk contained in any can or package having a capacity of forty quarts of condensed milk or milk from which the cream or any part thereof has been removed shall fix a label or tag on the outside of such can or package containing milk or condensed milk and this label or tag shall have on it the words "skimmed milk" or "condensed skimmed milk." These tags shall be printed in letters not less than one inch in height, and the several lines of which letters shall not be less than one-eighth of an inch in width, and such milk or condensed milk shall only be sold in a can or package thus marked. The penalty for violation of this act is twenty-five dollars for the first offense and fifty dollars for the second offense. Either the local board of health or the State Board of Health may bring action for the recovery of penalties for violations of this act.

CONTAGIOUS DISEASES OF ANIMALS.

The State Board of Health is charged with the supervision of contagious diseases of animals, with the exception of bovine tuberculosis. For carrying out the provisions of the law imposing this

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duty on the Board the sum of two thousand dollars is appropriated, and additional sums may be secured if made necessary by extensive epidemics. The Board is authorized to appoint one of its members to supervise the enforcement of the law and the Secretary of the Board is usually selected to perform this duty.

The Board is required to keep full and complete records of all proceedings under the act and report the same annually to the State Board of Agriculture, this report being included in and forming part of the Annual Report of the State Board of Agriculture.

In accordance with these requirements the report of this Board of cases of contagious diseases coming under its supervision is, herewith, submitted.

During the year ending October 31, 1912, one extensive epidemic only, viz.,—spinal meningitis—occurred among animals in New Jersey.

SPINAL MENINGITIS OF HORSES.

This disease has probably caused three hundred deaths of animals in our State within a few years. It has occurred especially along our coast and river lines, and has been named blind staggers, putrid sore throat, spinal meningitis, forage poisoning, etc. T. B. Rogers, D. V. S., of Woodbury, was requested to prepare a description of the disease together with suggestions as to its prevention. A circular containing this information is to be distributed to farmers and horse owners living in the section of the State where the disease is most prevalent. As the disease is unusual and as there is so little available literature in reference to it, portions of the information contained in the circular are herewith given.

"For many years horses have died along our coast and river lines from a disease that has been named blind staggers, putrid sore throat, spinal meningitis, forage poisoning, etc.

The disease is peculiar to the late summer and autumn seasons, and disappears with the first sharp frost. Its virulence varies, during some years it becomes a veritable scourge while in others but a few scattered cases are reported. On account of its mysterious and sudden onset, and its almost always fatal termination, usually

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resulting in its being reported to the State Board of Health for investigation, the Board deemed it wise to supply the information in its possession regarding the disease in order that losses through death or through the purchase of so-called remedies for the disease may be reduced to a minimum.

ANIMALS SUBJECT TO THE DISEASE.

All types of horses, young and old, weak and strong, kept under all sorts of conditions, are liable to attack. It is estimated that more than 80 per cent. of the affected horses die. Only a few mules in comparison with the proportion of horses have succumbed. Cattle, sheep and other animals escape. There is abundant evidence that the disease is not infectious or contagious. Suckling colts continue in good health, nursing during the development and course of the disease in the dam. Bostrom states, "I know of a few cases, which have been kept in the barn on dry feed for three weeks, but I know of no livery horses affected as yet and very few horses in the large cities."

CAUSE OF THE DISEASE.

From the fact that no germ has been obtained from horses affected with the disease that will cause the disease if injected into healthy susceptible horses, it does not seem probable that the disease is due to bacteria, and, when we consider the limitations of the outbreaks to the lowlands adjacent to our coast and river lines, the fact that they are coincident with the time when insects that bite horses are most plentiful, i. e., the late summer and early fall, ceasing shortly after cold weather sets in, and that the disease does not spread along lines of travel, we are driven to the conclusion that it is due to a protozoon (a protozoon represents a very low type of animal life, while bacteria are low forms of vegetable life) that passes one stage of its existence in some biting insect. Malarial fever and yellow fever of man and Texas fever of cattle belong to this class of diseases, and one of their characteristics is that they mostly require an intermediate bearer, which, biting the animal, introduces the cause of the disease.

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SYMPTOMS.

The symptoms vary greatly in the animals afflicted. As a rule the first change observed is a decided physical depression. The animal stands with head lowered and grinds his food slowly. The temperature at this time is usually above normal. It may be as high as 105°F., this elevated temperature lasts but a few hours, and when it falls continues below normal until death. The mucous membrane of the eyes and nose acquire a yellowish cast, and distinct hemorrhages may appear, particularly within the inner edges of the eyelids. Pulse continues normal until near the end, when it quickens and weakens noticeably. Respiration gradually slows up, the muscular paralysis progresses.

Paralysis is usually first noticeable in the muscles of the tail, which hangs limp, and the progress of the disease can be judged by the control the animal has over its tail. Twitching of the muscles of the face, particularly those of the lips, is observed frequently, and quite early after symptoms are first noticed the lips no longer are under control. General muscular twitching is seen early, and the animal at this time seems unusually sensitive to the touch. Sensation and the ability to move the superficial muscles of the body are gradually lost. Swallowing is difficult or impossible owing to paralysis of the muscles of the back part of the throat. Urine is often retained, and some animals salivate profusely. Loss of hearing and sight is not infrequently noticed.

Restlessness while on foot is not infrequent and a succession of lying down and rising is also observed at first. If the animal remains standing a peculiar posture is frequently observed. The horse will stand as though foundered, with most of the body weight on the hind legs. The weight in front is supported by the right front leg directly beneath the body with the left leg extending forward and outward. The horse gradually sinks back on the hind legs until it nearly loses its balance and then catches itself only to again settle back and repeat the step, which it is forced to take. Some hold the head to the left, others to the right. When the animal goes down, complete muscular paralysis, particularly of the hind legs seems to set in quickly. A fetid odor of the breath is also noticeable, but not constant.

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CONDITIONS FOUND ON EXAMINATION OF THE BODY AFTER DEATH.

These are not characteristic, there is more fluid than common on the brain and in the spinal canal, congestion and inflammation of the back of the throat and tongue, and sometimes inflammation of the stomach and intestines. In some cases there is a smell like fish-pickle pervading all or part of the body.

TREATMENT.

It will be evident that we are in the unfortunate position of having to deal with a disease the cause of which is not definitely known, and it is, therefore, impossible to prescribe remedies for it with the degree of assurance of relief that should always attend the introduction of medicine into the animal body, and it becomes necessary to caution horse owners against the use of so-called remedies whether they take the form of medicines given by the mouth, or the newer preparations, anti-toxins, serums, bacterins, etc., that are prepared as remedies for other germ diseases, the origin of which is known.

The cases should be reported to the State Board of Health and a qualified Veterinarian called to superintend the treatment. Keep the horses as far as possible off the marsh lands, and protect them from the bites of insects by covering them with mosquito netting, or spraying them with preparations sold for that purpose. Avoid purchasing stock while the outbreak continues."

GLANDERS.

Although this disease continues to cause the loss of valuable animals throughout the State, no epidemic has been reported during the year. In the larger counties of Hudson and Essex, the greater number of cases occur. The history of the disease in these counties for years past indicates that it probably continues to appear owing to the close proximity to New York City and to the buying and trading of cheap horses which may have been exposed to the disease.

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Whenever a notice of a case of glanders is received at this office, it is the practice of the Board either to direct a local veterinarian, or when there is some doubt as to diagnosis to direct a veterinarian selected by the Board, to cause the destruction of the animal or to apply such restrictive quarantine measures as will prevent the spread of the disease.

The total number of cases which has been reported to the Board during the year is 154. According to counties, they were reported as follows: Essex, 127; Hudson, 9; Middlesex, 4; Passaic, 3; Bergen, 2; Morris, 2; Somerset, 2; Sussex, 1; Union, 1; Warren, 2, and Monmouth, 1.

Of the total number of 154 cases reported, 5 animals died and the remaining animals were destroyed and the premises upon which they were found thoroughly disinfected.

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Vital Statistics.

POPULATION.

The following table shows the estimated population for the counties and certain cities in New Jersey for the calendar year 1911, and also the official figures taken from the State and Government reports, giving the population by five year periods from 1880 to 1910.

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TABLE 1.—POPULATION OF THE COUNTIES OF NEW JERSEY AND OF MUNICIPALITIES HAVING 5,000 INHABITANTS OR OVER FOR THE CENSUS YEARS 1880, 1885, 1890, 1895, 1900, 1905, 1910 AND ESTIMATED POPULATION FOR 1911.

	1880.	1885.	1890.	1895.	1900.	1905.	1910.	1911.
Atlantic County	13,704	22,256	25,836	34,750	46,402	59,862	71,894	74,300
Atlantic City	5,477	7,942	13,055	18,329	27,838	37,593	46,150	47,361
Hammonton	.....	.....	.....	.....	.....	.....	.....	5,239
Bergen County	36,786	39,880	47,226	65,251	78,441	100,003	138,002	146,602
Englewood	.....	.....	.....	.....	6,253	7,922	9,924	10,324
Garfield	.....	.....	.....	.....	.....	5,092	10,213	11,237
Hackensack	.....	.....	6,004	7,282	9,443	11,098	14,050	14,640
Ridgewood	.....	.....	.....	.....	.....	.....	.....	5,703
Rutherford	.....	.....	.....	.....	.....	5,218	7,045	7,410
Burlington County	55,403	57,558	58,528	59,117	58,241	62,042	66,565	67,470
Bordentown	5,334	5,857	5,090	5,176	4,110	4,073	4,250	4,285
Burlington	7,227	7,690	7,264	7,844	7,392	8,038	8,336	8,396
Camden County	62,942	76,685	87,687	100,104	107,642	121,555	142,029	146,124
Camden City	41,659	52,884	58,313	62,467	75,935	83,363	94,538	96,773
Gloucester City	5,347	5,966	6,564	6,225	6,840	8,055	9,462	9,743
Cape May County	9,765	10,744	11,268	12,855	13,201	17,390	19,745	20,216
Cumberland County	37,687	41,982	45,438	49,815	51,193	52,110	55,153	55,762
Bridgeton	8,722	10,065	11,224	13,292	13,913	13,624	14,209	14,326
Millville	7,660	8,824	10,002	10,466	10,583	11,884	12,451	12,564
Vineland	.....	.....	.....	.....	.....	.....	.....	5,420
Essex County	189,929	213,764	256,098	312,000	359,053	409,928	512,886	532,478
Bloomfield	.....	.....	7,708	8,093	9,668	11,668	15,070	15,750
East Orange	.....	.....	13,282	17,927	21,506	25,175	34,371	36,210
Irvington	.....	.....	.....	3,388	5,255	7,180	11,877	12,816
Montclair	.....	.....	8,656	11,753	13,962	16,370	21,550	22,586
Newark	136,508	152,988	181,830	215,806	246,070	283,289	347,469	360,305
Nutley	.....	.....	.....	.....	.....	.....	.....	6,300
Orange	13,207	15,231	18,844	22,792	24,141	26,101	29,630	30,336
South Orange	.....	.....	.....	.....	.....	.....	.....	6,230
West Orange	.....	.....	4,358	5,854	6,889	7,872	10,980	11,602
Gloucester County	25,886	27,603	28,649	31,191	31,905	34,477	37,368	37,946
Hudson County	187,944	240,342	275,126	328,680	386,048	449,879	537,231	554,701
Bayonne	9,372	13,080	19,033	19,856	32,722	42,262	55,545	58,202
Guttenberg	.....	.....	.....	.....	.....	.....	.....	5,864
Harrison	6,898	6,806	8,338	9,672	10,596	12,823	14,498	14,833
Hoboken	30,999	37,721	43,648	54,082	59,364	65,468	70,324	71,295
Jersey City	120,722	153,513	163,003	182,713	206,433	232,699	267,779	274,795
Kearny	.....	.....	.....	10,487	10,896	13,601	18,659	19,671
Town of Union	5,849	8,398	10,613	13,236	15,187	17,005	21,023	21,827
West Hoboken	.....	.....	11,665	18,296	23,094	29,082	35,403	36,667
West New York	.....	.....	.....	.....	5,267	7,196	13,560	14,833
Hunterdon County	38,570	37,420	35,355	35,334	34,507	33,258	33,569	33,631
Lambertville	.....	.....	.....	.....	.....	5,016	4,657	4,585
Mercer County	58,061	66,785	79,978	85,538	95,365	110,516	125,657	128,685
Chambersburg	5,487	8,542	.....	.....	.....	.....	.....	.....
Princeton	.....	.....	.....	.....	.....	6,029	5,126	4,957
Trenton	29,910	34,386	57,458	62,518	73,307	84,180	96,815	99,342
Middlesex County	52,286	56,180	61,754	70,058	79,762	97,036	114,426	117,904
New Brunswick	17,166	18,258	19,603	19,910	20,006	23,133	23,388	23,439
Perth Amboy	.....	.....	9,512	13,030	17,699	25,895	32,121	33,366
Roosevelt	.....	.....	.....	.....	.....	.....	.....	5,786
South Amboy	.....	.....	4,330	5,571	6,849	6,258	7,007	7,157
Monmouth County	55,538	62,324	69,128	76,543	82,057	87,919	94,734	96,097
Asbury Park	.....	.....	.....	.....	.....	.....	10,150	11,275
Long Branch	.....	6,140	7,231	7,338	8,372	12,183	13,298	13,521
Red Bank	.....	.....	4,145	4,888	5,428	6,263	7,398	7,625
Morris County	50,861	50,675	54,101	59,536	65,156	67,934	74,704	76,058
Dover	.....	.....	.....	.....	5,988	6,353	7,468	7,691
Morristown	6,827	8,760	8,156	10,290	11,267	12,146	12,507	12,579
Ocean County	14,455	15,586	15,974	18,739	19,747	20,880	21,318	21,406
Passaic County	68,860	83,374	105,046	133,227	155,202	175,858	215,902	223,911
Passaic City	6,532	.....	13,028	17,894	27,777	37,837	54,773	58,160
Paterson	51,031	.....	78,347	97,344	105,171	111,539	126,600	128,414
Salem County	24,579	25,878	25,151	26,084	25,530	26,287	26,999	27,141
Salem City	5,056	5,316	5,516	6,337	5,811	6,443	6,614	6,648
Somerset County	27,162	27,425	28,311	30,447	32,948	36,270	38,930	39,330
North Plainfield	.....	.....	.....	4,245	5,009	5,616	6,117	6,217
Somerville	.....	.....	.....	.....	.....	.....	.....	5,116
Sussex County	23,539	22,401	22,259	22,586	24,184	23,325	26,781	27,472
Union County	56,571	61,839	72,467	85,404	99,352	117,211	140,197	144,794
Elizabeth	28,229	32,119	37,764	43,834	52,130	60,509	73,409	75,989
Plainfield	8,128	8,912	11,267	13,629	15,369	18,468	20,550	20,966
Rahway	6,455	6,861	7,105	7,945	7,935	8,649	9,287	9,475
Summit	.....	.....	.....	4,450	5,302	6,845	7,500	7,631
Westfield	.....	.....	.....	.....	.....	5,265	6,420	6,651
Warren County	36,589	37,737	36,553	37,283	37,781	40,408	43,187	43,744
Phillipsburg	7,131	8,058	8,644	9,081	10,052	13,352	13,903	14,013

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COMPARATIVE DEATH-RATE OF THE WHITE AND COLORED INHABITANTS IN NEW JERSEY.

This table gives the estimated population for the past eleven years in the State of New Jersey, together with the estimated colored population, the total death-rate, the death-rate among the white inhabitants, and the death-rate among the colored inhabitants.

It will be noticed by comparing the death-rate between the white and colored inhabitants that the rate is much higher among the colored population.

TABLE 2.—SHOWING NUMBER OF WHITE AND COLORED INHABITANTS IN NEW JERSEY, WITH DEATH-RATES PER 1,000 POPULATION, FOR ELEVEN YEARS, 1901-1911.

YEARS.	Estimated population (total).	Estimated population (colored).	Total death-rate.	Death-rate white.	Death rate colored.
1901.....	1,883,669	72,011	16.48	16.65	21.79
1902.....	1,925,781	74,178	15.91	17.33	21.00
1903.....	2,016,797	76,345	15.87	15.44	24.32
1904.....	2,058,909	78,512	17.14	16.91	22.95
1905.....	2,144,143	79,485	15.79	15.57	21.59
1906.....	2,196,238	80,458	16.24	16.02	22.09
1907.....	2,248,331	81,431	16.63	16.42	22.47
1908.....	2,300,427	82,404	15.47	15.23	22.04
1909.....	2,352,522	83,377	15.46	15.29	20.09
1910.....	2,537,167	89,760	15.47	15.41	19.38
1911.....	2,615,772	91,815	14.76	14.56	20.29

BIRTHS.

It is gratifying to note there is a gradual increase in the birth-rate as shown by the number of reports of births filed with this department during the past year, however there are a large number of physicians and midwives who disregard the law in this respect.

It has been the policy of this department to make an effort to impress upon physicians, and others whose duty it is to report births, the importance of the same, and reference to table 3, which follows, shows that the birth-rate for the present year is higher than for any period during the past thirty-two years, and it is

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hoped that every physician will consider it a part of his duty to the State, as well as his client, to make a prompt and accurate report of every birth attended by him.

We have in previous reports called attention to the importance of these records in a legal and statistical way, and it is therefore unnecessary to further comment upon the same, however we wish to call the attention of local registrars throughout the state to the fact that any violation of the law in their district should be at once reported to their local board of health with recommendation that prosecution be ordered, or if the facts are presented to the State Board of Health the matter will receive prompt attention.

TABLE 3.—SHOWING POPULATION, NUMBER OF BIRTHS REPORTED, NUMBER OF MARRIAGES AND NUMBER OF DEATHS IN NEW JERSEY, WITH BIRTH-RATES, MARRIAGE RATES, AND DEATH-RATES FOR THE THIRTY-THREE YEARS ENDING DECEMBER 31, 1911.

YEAR.	Population.*	BIRTHS.		MARRIAGES.		DEATHS.	
		Number of births reported	Birth-rate per 1,000 population.	Number of marriages.	Persons married per 1,000 population.	Number of deaths.	Death-rate per 1,000 population.
1879	1,020,584	23,116	22.65	7,096	13.91	20,440	20.03
1880	1,130,892	22,680	20.94	7,963	14.08	18,967	16.77
1881	1,160,275	23,484	20.24	8,109	13.98	20,812	17.94
1882	1,189,658	23,108	19.42	8,837	14.86	25,959	21.82
1883	1,209,048	24,430	20.21	9,166	15.16	23,310	19.28
1884	1,248,224	25,263	20.20	8,968	14.37	21,716	17.40
1885	1,278,033	24,077	18.84	8,989	14.07	23,807	18.63
1886	1,310,431	25,497	19.46	12,351	18.85	22,734	17.35
1887	1,342,829	27,340	20.36	15,416	22.96	24,331	18.12
1888	1,375,227	28,074	20.41	16,025	23.31	27,178	19.76
1889	1,407,625	29,099	20.67	15,726	22.34	26,543	18.86
1890	1,441,017	30,103	20.89	15,564	21.60	28,530	19.80
1891	1,478,734	28,882	19.53	15,305	20.70	28,840	19.50
1892	1,511,653	30,627	20.26	16,082	21.28	32,685	21.62
1893	1,538,799	32,285	20.98	17,178	22.33	30,596	19.88
1894	1,578,373	33,662	21.33	16,245	20.58	30,004	19.09
1895	1,672,942	31,742	18.97	15,873	18.98	30,634	18.31
1896	1,718,543	31,207	18.16	18,370	21.38	30,767	17.90
1897	1,764,144	31,595	17.91	18,171	20.60	29,823	16.90
1898	1,810,008	32,515	17.96	13,213	14.59	27,337	15.11
1899	1,855,872	29,419	15.84	13,336	14.37	30,999	16.70
1900	1,883,669	32,270	17.13	14,611	15.51	31,474	16.62
1901	1,925,781	34,812	18.08	16,539	17.18	31,739	16.48
1902	1,967,893	35,116	17.84	18,150	18.45	31,319	15.91
1903	2,016,797	37,242	18.47	19,512	19.35	31,820	15.87
1904	2,058,909	38,751	18.82	18,919	18.38	35,298	17.14
1905	2,144,143	39,689	18.51	20,572	19.19	33,864	15.79
1906	2,196,238	42,677	19.43	21,580	19.65	35,670	16.24
1907	2,248,331	44,651	19.86	23,649	21.04	37,408	16.63
1908	2,300,427	47,405	20.61	26,155	22.74	35,597	15.47
1909	2,352,522	47,508	20.19	29,724	25.27	36,359	15.46
1910	2,537,167	53,942	21.26	27,912	22.00	39,494	15.57
1911	2,615,772	58,133	22.22	25,014	19.13	38,612	14.76

*Estimated except for census years.

NOTE.—The reports of births are not as complete as are those for marriages and deaths, hence the above table does not represent with accuracy the relation between birth-rates and death-rates.

NOTE.—The large number of marriages reported during the years 1886-1897 was due to the unrestricted authority contained in the laws for the performance of the marriage ceremony in the case of non-residents, and the marked decrease in the number of marriages which occurred in 1898 was directly consequent upon the enactment of the law requiring a license in cases where both parties are non-residents of the State, and again in 1910, when the law became operative requiring that all persons marrying in New Jersey shall first secure a license.

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MARRIAGES.

The marriage license law has been the means of further reducing the number of marriages in this state and as the law becomes perfected, the marriage rate in New Jersey will become normal, and reliable figures as to the number of persons married from year to year will be available.

The license law has been very successful and comment on the same, with suggestions for improvement, will be found in the report of the State Registrar in this volume.

TABLE 4.—SHOWING NUMBER OF MARRIAGES RECORDED IN NEW JERSEY FOR THE THIRTY-THREE YEARS ENDING DECEMBER 31, 1911.

	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889
Marriages in New Jersey..	7,096	7,963	8,109	8,837	9,166	8,968	8,989	12,351	15,416	16,025	15,726
Persons married 1,000 pop....	13.91	14.08	13.98	14.86	15.16	15.37	14.07	18.85	22.96	23.31	22.34

	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
Marriages in New Jersey..	15,564	15,305	16,082	17,178	16,245	15,873	18,370	18,171	13,213	13,336	14,611
Persons married 1,000 pop. ...	21.60	20.70	21.28	22.33	20.59	19.98	21.38	20.60	14.50	15.40	15.51

	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Marriages in New Jersey..	16,539	18,150	19,512	18,919	20,572	21,580	23,649	26,155	29,724	27,912	25,014
Persons married 1,000 pop. ...	17.23	18.45	19.35	18.38	19 19	19.65	21.04	22.74	25.27	22.00	19.13

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DEATHS.

The death-rate for the year ending Dec. 31, 1911, is 14.76, and this is the lowest rate for any year of which this department has record.

The great amount of legislation for the promotion of the public health enacted during the last few years, together with additional authority given the State Board of Health, will no doubt be the means of further reducing the death-rate in New Jersey during the years to come.

CHART SHOWING DEATH RATES IN NEW JERSEY, PER 1,000 INHABITANTS FOR THIRTY-THREE YEARS, 1879-1911.

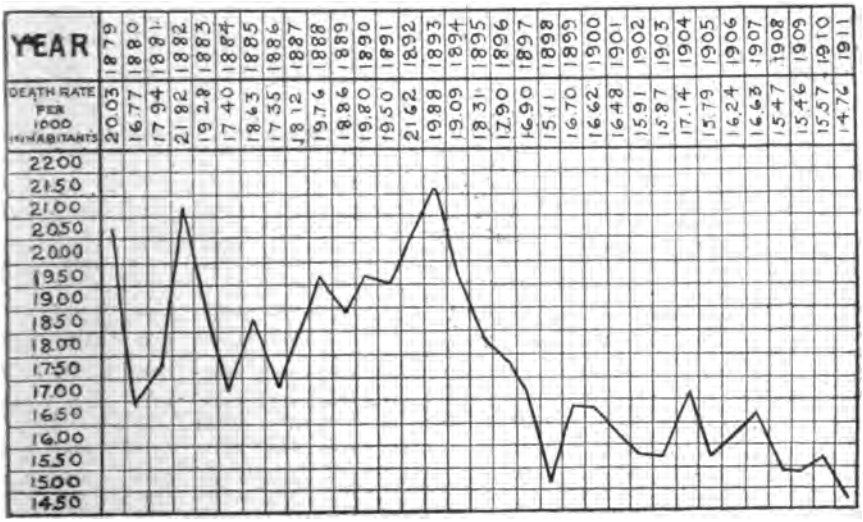


TABLE 5.—DEATHS IN NEW JERSEY, BY AGE PERIODS, FOR THE YEAR ENDING DECEMBER 31, 1911.

AGE PERIODS.																				Total number of deaths.
Under 1 mo.	Under 1 year.	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.		
2,891	4,941	3,003	910	520	333	1,355	1,421	1,521	1,907	1,761	1,817	2,061	2,134	4,879	4,373	2,078	200	12		38,612

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TABLE 6.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM CERTAIN CLASSIFIED DISEASES FOR THIRTY THREE YEARS, 1879-1911.

DISEASES.	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889
Acute lung diseases..	2,160	1,988	2,208	2,752	2,756	2,174	2,566	2,300	2,557	2,922	2,862
Consumption, M.	2,788	2,714	2,98x	1,696	1,527	1,557	1,673	1,651	1,910	1,723	1,773
Consumption, F.	.....	.....	.....	1,779	1,594	1,658	1,647	1,554	1,743	1,635	1,677
Diarrhoeal diseases of children	1,849	2,166	2,305	2,792	2,656	2,462	2,845	2,664	2,694	3,508	2,377
Adult brain and spinal diseases	1,314	1,347	1,502	1,521	1,562	1,664	1,895	1,932	1,966	2,095	1,991
Brain and nervous diseases of children...	1,647	1,638	1,642	1,999	1,683	1,598	1,791	1,774	1,886	1,971	1,922
Diseases of the heart and circulation	972	982	1,213	1,181	1,235	1,324	1,503	1,506	1,530	1,691	1,786
Diphtheria and croup	1,100	873	1,128	1,472	1,146	1,027	1,496	1,303	1,527	2,036	1,574
Digestive and intestinal diseases	1,041	1,005	1,080	740	923	1,075	1,140	1,213	1,242	1,476	1,450
Renal and cystic diseases	558	516	608	765	759	892	939	926	873	1,020	1,056
Violent deaths	.....	.....	.....	793	907	.....	857	997	1,051	1,320	1,077
Cancer	378	425	451	402	461	484	498	546	574	612	579
Typhoid fever	324	373	574	884	564	640	642	545	522	620	724
Scarlet fever	627	573	499	1,306	853	547	646	222	255	574	522
Puerperal	194	244	303	244	198	211	268	257	263	271	254
Whooping cough	277	130	110	253	189	116	181	274	181	161	278
Malarial fever	268	293	431	379	290	230	209	243	21[illegible]	264	202
Measles	77	87	70	206	131	189	135	88	296	74	118
Erysipelas	137	109	124	94	90	80	74	79	96	128	114
Acute rheumatism ..	76	64	89	52	33	62	36	68	132	142	117
Small-pox	.....	15	254	367	54	7	2	4	5	5	3
Total deaths per year	15,797	15,542	17,539	25,910	23,310	21,716	23,807	22,734	24,331	27,173	26,542

DISEASES.	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
Acute lung diseases ..	3,804	4,101	3,187	3,974	4,183	4,597	4,146	4,039	3,414	4,322	4,795
Consumption, M.	1,903	1,849	1,851	1,790	1,831	1,860	1,786	1,765	1,772	1,956	1,787
Consumption, F.	1,767	1,607	1,724	1,637	1,602	1,682	1,572	1,472	1,453	1,628	1,727
Diarrhoeal diseases of children	3,527	3,191	4,043	3,981	3,893	3,746	3,807	3,450	2,958	3,568	3,010
Adult brain and spinal diseases	2,308	2,333	2,457	2,611	2,413	2,626	2,610	2,582	2,700	2,842	2,946
Brain and nervous diseases of children...	2,032	2,029	2,242	2,072	2,083	1,925	2,018	1,809	1,642	1,950	1,767
Diseases of the heart and circulation ...	1,945	1,960	2,183	2,179	2,112	2,268	2,412	2,475	2,276	2,731	2,852
Diphtheria and croup	1,575	1,737	1,776	1,677	1,294	1,464	1,587	1,382	950	777	927
Digestive and intestinal diseases	1,521	1,573	1,625	1,753	1,565	1,589	1,622	1,572	1,484	1,566	1,700
Renal and cystic diseases	1,149	1,200	1,444	1,441	1,447	1,523	1,584	1,752	1,694	1,925	2,072
Violent deaths	1,235	1,365	1,427	1,538	1,500	1,469	1,426	1,685	1,451	1,724	1,724
Cancer	640	642	688	723	731	770	811	857	852	946	921
Typhoid fever	782	695	628	506	485	568	577	478	450	486	356
Scarlet fever	209	288	1,008	445	272	264	183	203	201	187	220
Puerperal	250	296	282	282	293	294	283	278	264	267	288
Whooping cough	371	299	163	237	328	272	275	321	155	282	306
Malarial fever	195	180	198	148	162	144	119	132	82	96	84
Measles	174	250	197	73	257	95	390	156	195	96	231
Erysipelas	81	85	94	74	97	74	69	68	58	88	111
Acute rheumatism ...	106	76	100	102	91	82	59	69	55	73	73
Small-pox	.....	.....	38	43	11	23	2	.....	.....	.....	5
Total deaths per year	28,530	28,810	32,685	37,596	30,004	30,634	30,767	29,822	27,337	30,999	31,474

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TABLE 6.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM CERTAIN CLASSIFIED DISEASES FOR THIRTY-THREE YEARS, 1879-1911—*Continued.*

DISEASES.	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Acute lung diseases..	4,188	4,236	4,265	5,309	4,445	5,230	5,515	4,787	5,363	5,330	5,035
Consumption, M	3,257	3,015	3,380	3,670	3,587	3,654	3,749	3,616	3,608	3,877	3,907
Consumption, F											
Pneumonia	2,539	2,421	2,628	3,486	2,764	3,117	3,307	2,773	3,094	3,156	3,024
Diarrhoeal diseases of children	1,895	1,878	1,603	2,423	2,290	2,397	2,492	2,575	2,369	2,929	2,611
Adult brain and spinal diseases	2,836	2,787	2,880	3,053	3,942	3,219	3,402	3,246	3,245	3,679	3,634
Brain and nervous diseases of children ..	2,012	1,806	1,795	1,986	2,095	1,717	1,688	1,489	1,452	818	705
Diseases of the heart and circulation	2,772	3,066	3,166	3,301	3,316	3,460	3,911	3,841	4,023	4,438	4,497
Diphtheria and croup	683	683	748	918	699	673	632	535	610	728	568
Digestive and intestinal diseases	2,221	2,042	2,060	2,279	2,183	2,245	2,459	2,305	2,258	2,645	2,389
Renal and cystis diseases	2,043	2,021	2,160	2,361	2,487	2,543	2,803	2,640	2,797	3,039	3,165
Violent deaths	2,153	1,775	2,010	2,206	2,162	2,313	2,447	2,366	2,479	2,528	2,766
Cancer	1,042	1,031	1,132	1,125	1,282	1,389	1,466	1,535	1,663	1,838	1,942
Typhoid fever	352	428	388	384	360	408	464	367	301	392	337
Scarlet fever	179	217	299	416	164	193	286	396	338	229	214
Puereral	207	225	279	221	238	322	289	329	311	377	427
Whooping cough	157	281	245	124	186	388	245	237	284	389	364
Malarial fever	50	36	40	47	21	36	29	30	25	25	25
Measles	77	204	41	180	98	203	144	189	242	186	281
Erysipelas	71	69	86	113	90	94	106	96	57	112	97
Acute rheumatism ..	116	94	71	68	101	109	87	97	68	54	94
Small-pox	142	432	16	24	1	1	1	0	2	0	1
Total deaths per year	31,739	31,319	31,820	35,298	33,864	35,670	37,408	35,597	36,359	39,429	38,612

TABLE 7.—DEATHS IN NEW JERSEY, PER 10,000 POPULATION, FROM CERTAIN CLASSIFIED CAUSES, FOR THIRTY-THREE YEARS.

CAUSES OF DEATH.	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889
Acute lung diseases	21.16	17.57	17.30	23.13	22.79	17.41	20.07	17.55	19.04	21.74	20.83
Consumption	27.31	23.92	25.76	29.21	25.81	25.75	25.97	24.25	27.20	24.41	24.50
Diarrhoeal diseases of children	18.11	19.15	19.43	15.06	21.96	19.72	22.25	20.32	20.06	25.50	23.99
Adult brain and spinal diseases	12.87	11.91	12.94	12.78	12.91	13.38	14.82	14.74	13.64	15.23	14.14
Brain and nervous diseases of children	16.13	14.43	14.15	16.80	13.92	12.80	14.01	13.53	14.04	14.33	13.66
Diseases of heart and circulation ..	9.52	8.65	10.45	9.92	10.21	10.60	11.75	11.49	11.39	12.29	12.68
Diphtheria and croup	10.86	7.71	9.72	12.37	9.47	8.21	11.70	9.94	11.37	14.80	11.18
Digestive and intestinal diseases ..	10.20	8.88	9.30	6.22	7.63	8.62	8.91	9.25	9.24	10.73	10.30
Renal and cystic diseases	5.46	4.56	5.24	6.43	6.27	7.14	7.34	7.06	6.50	7.41	7.50
Violent deaths	.....	.....	.....	6.60	7.50	.....	6.59	7.60	7.82	9.59	7.65
Cancer	3.70	3.75	3.88	3.37	3.81	3.87	3.89	4.15	4.21	4.45	4.11
Typhoid fever	3.17	3.29	4.94	7.43	4.66	5.12	5.02	4.15	3.83	4.50	5.14
Scarlet fever	6.14	5.06	4.30	10.09	7.05	4.38	5.05	1.69	1.89	4.17	3.78
Puerperal	1.90	2.15	2.61	2.05	1.63	1.77	2.09	1.96	1.95	1.97	1.80
Whooping cough	2.71	1.14	1.02	2.12	1.56	.91	.41	2.09	1.34	1.17	1.97
Malarial fever	2.62	2.59	2.74	3.10	2.39	1.84	1.62	1.85	1.61	1.91	1.44
Measles	.75	.76	.60	.78	1.08	1.51	1.05	.67	2.20	.58	.88
Erysipelas	1.34	.96	1.06	.79	.74	.64	.57	.60	.71	.93	.80
Acute rheumatism	.74	.56	.76	.43	.27	.49	.28	.51	.98	.10	.83
Small-pox	.....	.13	2.18	3.08	.44	.56	.01	.03	.03	.03	.02

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TABLE 7.—DEATHS IN NEW JERSEY, PER 10,000 POPULATION, FROM CERTAIN CLASSIFIED CAUSES, FOR THIRTY-THREE YEARS—*Continued.*

CAUSES OF DEATH.	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
Acute lung diseases	26.39	27.73	34.31	25.82	26.50	27.49	24.12	22.89	18.86	23.29	25.31
Consumption	24.46	23.37	23.64	22.28	21.77	21.17	19.53	18.34	17.81	19.31	18.48
Diarrhoeal diseases of children	24.47	21.57	26.74	25.87	24.66	22.39	22.15	19.55	16.34	19.23	15.33
Adult brain and spinal diseases	16.01	15.77	16.25	16.96	15.28	15.69	15.18	14.63	14.91	15.31	15.49
Brain and nervous diseases of children	14.10	13.72	14.83	13.46	12.11	11.50	11.74	10.25	9.06	10.53	9.29
Diseases of heart and circulation	18.49	13.25	14.41	14.16	12.74	13.55	14.03	14.52	12.62	14.92	14.99
Diphtheria and croup	10.92	11.74	11.74	10.89	8.19	8.75	10.22	7.83	5.24	4.19	4.87
Digestive and intestinal diseases	10.55	10.63	10.74	11.39	9.92	9.49	9.43	8.91	8.19	8.38	9.47
Renal and cystic diseases	7.97	8.11	9.55	9.36	9.16	9.10	9.21	9.92	9.85	10.37	10.90
Violent deaths	8.57	9.23	9.48	9.99	9.50	8.78	8.29	9.55	8.01	9.29	9.00
Cancer	4.41	4.34	4.55	4.69	4.63	4.60	4.71	4.83	4.70	5.10	4.81
Typhoid fever	5.42	4.69	4.15	3.28	3.07	3.39	3.35	2.70	2.48	2.62	1.87
Scarlet fever	1.45	1.94	6.66	2.89	1.72	1.57	1.06	1.15	1.11	1.01	1.16
Puerperal	1.73	2.00	1.86	1.83	1.85	1.75	1.64	1.57	1.45	1.44	1.51
Whooping cough	2.57	2.07	1.07	1.54	2.07	1.62	1.60	1.81	.85	1.51	1.61
Malarial fever	1.35	1.21	1.30	.96	1.02	.85	1.69	1.74	.45	.52	.40
Measles	1.20	1.69	1.30	.47	1.62	.56	2.26	.88	1.47	.52	1.31
Erysipelas	.56	.57	.62	.48	.61	.41	.40	.38	.32	.47	.58
Acute rheumatism	.73	.51	.66	.66	.57	.49	.34	.39	.31	.39	.38
Small-pox	.....	.....	.25	.27	.06	.13	.01	.....	.....	.....	.....

CAUSES OF DEATH.	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Acute lung diseases	23.27	23.18	22.73	27.78	20.75	23.81	24.50	20.81	22.80	21.07	19.25
Consumption	16.91	15.32	16.76	17.83	16.73	16.64	16.67	15.72	15.34	15.28	14.94
Diarrhoeal diseases of children	9.84	9.54	7.95	11.77	10.68	10.91	11.08	11.19	10.07	11.54	9.98
Adult brain and spinal diseases	16.20	16.40	16.60	16.51	13.72	14.62	15.13	14.11	13.79	14.50	13.89
Brain and nervous diseases of children	11.26	9.72	9.95	10.68	9.77	7.82	7.51	6.47	6.17	3.22	2.70
Diseases of heart and circulation	14.37	15.58	15.70	16.03	15.47	15.75	17.39	16.70	17.10	17.42	17.19
Diphtheria and croup	3.56	3.74	3.71	4.46	3.26	3.06	2.81	2.33	2.59	2.87	3.17
Pneumonia *	13.18	12.30	13.03	16.93	12.89	14.19	14.76	12.05	13.15	12.44	11.56
Digestive and intestinal diseases	11.42	10.33	10.21	11.03	10.18	10.22	10.94	10.02	9.60	10.43	9.18
Renal and cystic diseases	10.45	10.27	10.71	11.47	11.58	11.58	12.47	11.48	11.89	11.98	12.10
Violent deaths	11.20	9.02	9.97	11.56	10.08	10.53	10.88	10.29	10.54	9.96	10.57
Cancer	5.42	5.24	5.61	5.46	5.98	6.32	6.52	6.67	7.07	7.24	7.42
Typhoid fever	1.83	2.17	1.92	1.87	1.68	1.86	2.06	1.60	1.28	1.55	1.29
Scarlet fever	.93	1.10	1.48	2.02	.76	.88	1.27	1.72	1.44	.90	.82
Puerperal	1.70	1.14	1.38	1.07	1.11	1.47	1.29	1.43	1.32	1.49	1.62
Whooping cough	.82	1.43	1.21	.60	1.33	1.77	1.09	1.03	1.31	1.53	1.39
Malarial fever	.26	.18	.20	.23	.10	.16	.13	.13	.11	.10	.10
Measles	.40	1.04	.20	.87	.46	.92	.64	.82	1.03	.73	1.07
Erysipelas	.37	.35	.43	.55	.42	.43	.47	.42	.24	.44	.37
Acute rheumatism	.60	.43	.35	.33	.47	.50	.39	.42	.29	.21	.36
Small-pox	.74	2.20	.07	.01	.....	.....	.....	.....	.01	.....	.....

* Deaths under this classification were not separately recorded until 1901.

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TABLE 8.—SHOWING DEATH-RATE, PER 1,000 POPULATION, IN THE CITIES OF NEW JERSEY HAVING OVER 5,000 POPULATION, FOR THIRTY-THREE YEARS, 1879-1911.

	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888
Atlantic City*	.....	.....	24.46	31.76	26.29	32.50	23.54	21.03	27.20	29.34
Bordentown	16.82	16.89	16.31	16.88	16.87	19.68	15.88	15.88	13.32	16.56
Burlington	21.10	15.61	18.37	22.94	18.51	18.93	24.45	21.46	17.30	21.46
Camden	18.88	19.27	22.90	24.55	20.01	22.37	18.30	19.27	20.49	22.79
Gloucester	14.10	15.70	20.19	18.32	21.88	21.69	15.42	16.59	22.96	23.13
Bridgeton	16.72	17.75	19.72	23.85	15.48	18.69	17.78	11.92	16.19	17.69
Millville	20.22	22.71	22.71	17.75	18.27	18.54	16.89	15.75	16.55	21.65
Newark	25.26	18.71	21.12	28.66	25.49	24.70	24.28	23.94	24.40	27.02
Orange	19.88	16.35	18.02	25.44	21.81	22.03	19.70	19.95	21.14	24.49
Bayonne	26.73	15.04	16.43	26.89	20.91	22.19	18.58	23.78	23.16	26.38
Harrison	.....	23.41	20.00	24.61	22.18	32.08	28.96	26.01	26.74	28.50
Hoboken	27.01	28.71	25.82	31.42	25.90	22.19	22.35	24.52	24.28	28.13
Jersey City	28.04	20.98	23.61	30.12	25.74	25.15	22.42	22.02	24.01	25.93
Town of Union	.....	20.04	18.80	36.93	35.73	23.42	25.84	22.03	22.74	24.77
Trenton	26.08	20.68	18.89	20.53	20.79	21.13	17.48	15.12	17.80	19.51
New Brunswick	19.50	15.66	18.81	22.78	26.79	28.18	18.40	19.06	19.17	19.28
Perth Amboy	.....	.....	.....	.....	.....	.....	.....	19.17	23.77	27.41
Long Branch*	.....	.....	.....	.....	.....	.....	.....	12.84	14.00	20.04
Morristown	16.40	18.71	15.94	17.70	28.96	20.77	14.61	13.70	13.58	18.95
Passaic	.....	21.78	19.44	22.82	20.82	23.58	16.64	21.02	22.82	24.38
Paterson	25.61	23.07	22.75	29.61	27.72	28.33	20.29	17.38	22.83	24.38
Salem	.....	15.02	14.63	19.58	23.14	15.43	19.22	22.30	16.13	18.85
Elizabeth	18.20	15.58	19.97	21.68	24.30	20.93	21.70	18.90	22.32	23.28
Plainfield	18.01	12.06	16.00	18.58	19.81	16.25	15.82	17.17	17.17	22.31
Rahway	24.31	17.97	16.11	28.35	20.29	17.19	15.60	14.58	16.91	20.41
Phillipsburg	14.08	17.54	15.87	23.53	20.46	18.10	18.37	14.40	19.24	13.28

	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898
Atlantic City*	26.93	21.01	20.46	20.19	16.47	18.38	19.20	18.78	20.45	16.89
Hackensack	.....	.....	.....	.....	20.71	13.50	15.52	11.54	14.49	11.43
Bordentown	15.02	18.43	29.79	30.72	17.44	14.91	15.65	18.07	14.78	18.17
Burlington	20.13	18.30	20.44	24.24	18.82	25.47	18.87	19.28	18.20	14.28
Camden	18.73	23.15	23.68	25.37	22.06	23.35	22.07	19.97	20.71	17.82
Gloucester	21.82	18.89	21.85	23.38	24.77	20.73	23.78	28.13	25.61	18.31
Bridgeton	14.81	17.70	19.50	16.55	17.62	16.38	16.85	14.41	15.02	13.10
Millville	13.43	19.48	16.51	16.62	15.23	13.79	17.01	15.34	9.67	12.33
Montclair	.....	.....	.....	.....	.....	.....	.....	13.90	10.63	11.76
Newark	25.59	27.26	23.69	29.17	24.67	22.68	21.52	20.79	19.60	16.65
Orange	22.85	24.50	20.29	23.31	20.38	19.37	18.69	19.89	16.50	19.08
Bayonne	24.24	20.37	20.37	21.11	19.74	19.71	22.51	20.52	21.80	25.00
Harrison	26.65	27.67	31.70	28.27	26.50	22.17	25.12	25.45	18.61	23.77
Hoboken	25.57	25.62	25.41	26.97	23.97	24.63	22.98	22.59	21.94	18.06
Jersey City	22.66	25.96	26.60	27.78	26.67	25.32	24.61	23.61	19.60	19.16
Town of Union	19.74	22.42	26.05	20.80	20.31	18.97	17.62	15.86	14.70	13.58
Trenton	14.94	17.35	15.51	19.75	16.16	14.14	18.01	18.60	16.44	15.45
New Brunswick	20.18	17.71	17.51	24.60	16.31	17.96	17.38	20.03	19.33	14.73
Perth Amboy	24.76	17.41	23.05	22.61	19.71	18.47	18.96	17.84	17.11	14.93
South Amboy	.....	.....	.....	.....	.....	.....	.....	.....	17.31	13.14
Long Branch*	12.41	14.66	12.16	12.40	10.85	9.88	14.18	12.51	14.11	18.13
Dover	.....	.....	.....	.....	.....	.....	.....	.....	19.12	15.73
Morristown	24.32	19.91	16.55	20.80	18.55	19.04	18.56	18.85	16.16	17.38
Passaic	24.86	16.81	23.77	22.27	21.64	20.07	21.57	22.26	24.29	19.84
Paterson	23.02	21.87	22.95	22.61	21.00	20.31	18.25	19.22	18.71	15.89
Salem	18.18	17.60	16.86	19.58	17.42	20.49	16.69	16.77	16.65	18.30
Elizabeth	20.18	19.30	19.41	21.19	20.22	18.95	18.23	18.05	17.16	15.50
Plainfield	16.97	16.89	16.87	17.04	19.21	17.33	17.39	18.37	15.91	14.16
Rahway	19.20	19.32	17.61	23.05	23.87	18.76	18.12	17.13	16.06	14.30
Phillipsburg	15.98	14.96	15.75	14.77	14.29	13.50	20.71	14.70	16.75	18.40

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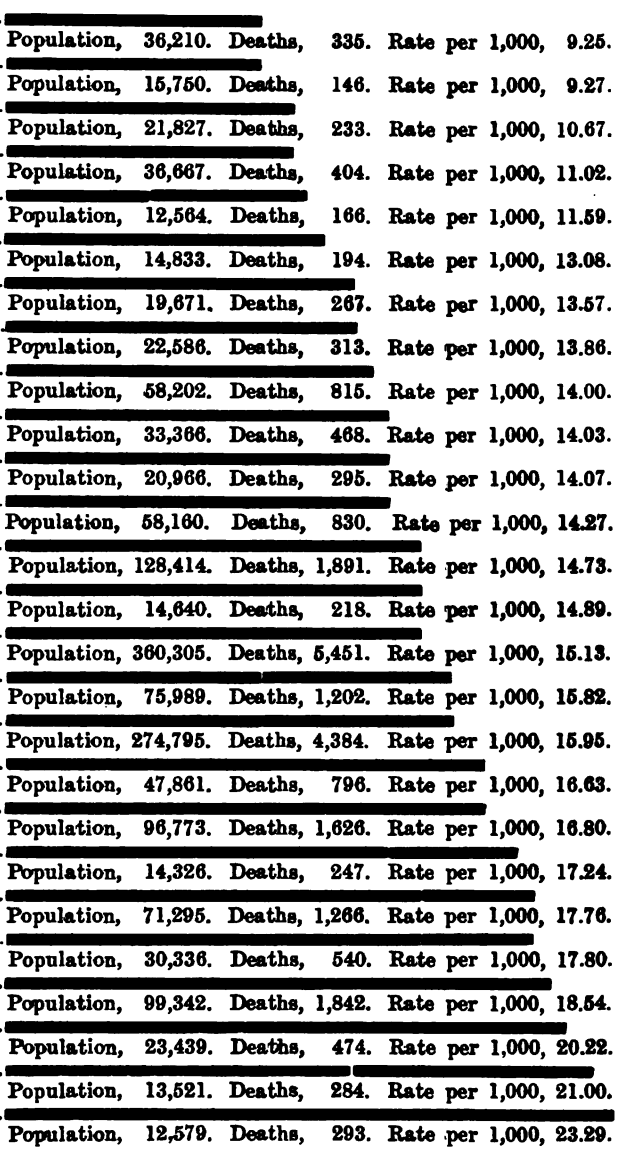
TABLE 8.—SHOWING DEATH-RATE PER 1,000 POPULATION, IN THE CITIES OF NEW JERSEY HAVING OVER 5,000 POPULATION, FOR THIRTY THREE YEARS, 1879-1911—*Continued.*

	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Atlantic City*	19.03	17.85	10.85	16.28	15.33	14.92	16.79	17.95	16.85	15.10	14.96	17.33	16.63
Hammonton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.98
Englewood	17.57	17.75	15.74	16.45	15.86	18.82	14.90	17.08	16.65	14.12	14.58	15.72	13.56
Garfield	.....	.....	.....	.....	.....	.....	.....	.....	15.89	19.52	22.01	12.73	12.10
Hackensack	14.94	13.66	17.52	18.34	16.39	13.78	17.48	16.89	18.54	14.06	15.38	16.23	14.89
Ridgewood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.27
Rutherford	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9.04	9.79	7.69
Bordentown	17.35	19.46	16.55	17.27	18.73	19.71	13.26	17.19	15.52	17.53	13.60	18.82	18.90
Burlington	16.87	24.76	19.75	21.28	22.46	22.32	16.67	17.87	18.68	18.63	15.66	18.00	14.53
Camden	19.35	14.11	17.56	16.90	16.05	18.01	16.17	18.44	17.44	16.75	16.57	17.21	16.80
Gloucester	19.50	19.88	11.27	21.03	17.89	17.32	18.37	18.44	19.55	19.58	17.95	15.54	13.46
Bridgeton	13.74	14.38	13.32	13.89	13.78	16.66	14.09	14.31	17.69	13.38	15.68	15.20	17.24
Millville	13.38	15.78	14.61	16.27	14.13	16.67	13.72	13.67	14.00	14.77	11.68	11.97	11.50
Vineland	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19.56
Bloomfield	.....	.....	14.55	13.50	11.21	14.64	11.40	14.09	11.63	12.28	11.46	11.15	9.27
East Orange	.....	10.97	9.71	10.94	9.72	12.11	10.72	10.38	11.15	10.15	11.45	10.77	9.25
Irvington	.....	.....	9.24	14.66	12.86	10.67	12.53	13.35	14.34	11.88	14.56	11.96	12.48
Montclair	13.00	15.11	16.87	14.48	17.42	20.28	18.02	15.49	16.79	13.19	15.14	15.03	13.86
Newark	19.40	19.60	19.14	18.71	18.47	19.61	17.45	19.08	19.11	17.01	17.62	16.65	15.13
Nutley	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10.63
Orange	18.19	20.63	17.45	20.26	20.40	21.85	20.46	20.34	19.08	19.25	16.16	17.72	17.80
South Orange	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10.43
West Orange	.....	.....	13.25	10.27	10.52	11.02	13.59	10.66	11.49	12.53	13.40	8.65	9.14
Bayonne	25.59	17.39	16.38	15.32	18.44	16.60	15.76	17.18	16.56	15.05	13.32	16.35	13.08
Guttenberg	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.13
Harrison	19.18	22.37	21.24	19.33	18.63	16.69	18.87	17.56	19.25	15.75	12.32	16.35	13.08
Hoboken	19.91	23.01	18.67	18.80	17.70	22.33	21.11	21.46	22.91	18.31	17.64	18.90	17.76
Jersey City	19.78	20.34	19.12	18.65	18.82	20.85	18.88	19.36	19.42	17.82	17.36	16.46	15.95
Kearny	.....	.....	.....	17.45	17.68	23.70	17.20	17.54	14.50	15.57	13.13	14.79	13.57
Town of Union	11.63	14.16	11.25	16.39	16.07	17.76	12.94	16.52	16.41	16.25	15.01	11.99	10.67
West Hoboken	.....	.....	.....	12.95	11.76	14.48	14.37	12.71	11.79	12.27	12.40	10.90	11.02
West New York	.....	.....	.....	14.85	11.98	16.14	15.42	13.72	17.07	16.88	17.39	12.46	11.85
Lambertville	.....	.....	.....	.....	.....	.....	.....	.....	14.71	9.73	13.54	12.24	11.56
Princeton	.....	.....	.....	.....	.....	.....	.....	.....	9.16	14.23	7.89	15.19	14.73
Trenton	17.71	16.42	16.35	17.19	18.30	18.09	17.63	17.28	18.06	17.92	17.88	20.34	18.54
New Brunswick	16.04	21.29	18.18	20.00	19.43	22.16	19.66	17.76	19.19	18.15	19.00	21.21	20.22
Perth Amboy	16.16	14.46	16.53	14.82	12.70	14.39	12.20	12.89	13.68	12.82	13.31	15.78	14.03
Roosevelt	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15.04
South Amboy	12.65	13.86	16.14	19.52	15.68	16.06	19.97	21.89	16.86	14.51	15.20	15.41	13.83
Asbury Park*	.....	.....	.....	.....	.....	.....	.....	.....	14.58	16.35	17.08	16.75	12.83
Long Branch*	17.51	18.15	24.07	21.50	20.21	22.37	21.51	18.15	18.59	16.02	17.66	21.96	21.00
Red Bank	.....	.....	16.44	12.58	12.52	15.87	15.97	14.31	13.79	12.57	14.72	15.27	15.08
Dover	14.34	12.46	16.01	15.39	13.87	14.09	15.58	11.19	15.95	13.33	16.60	13.39	12.74
Morristown	19.18	16.38	18.50	16.64	17.95	18.84	20.42	21.10	22.49	21.07	19.77	23.67	23.29
Passaic	23.64	20.99	18.22	17.74	20.03	18.52	18.29	16.39	19.30	17.37	17.06	14.95	14.27
Paterson	19.65	18.70	17.53	16.37	15.28	17.84	16.51	17.66	16.12	16.19	16.19	14.73	14.73
Salem	18.30	20.13	14.11	16.00	17.21	20.31	16.92	16.90	16.28	17.30	13.10	14.21	15.64
North Plainfield	.....	.....	12.40	12.44	13.17	11.57	17.27	9.59	14.85	9.03	10.65	12.75	13.35
Somerville	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19.16
Elizabeth	17.25	17.69	17.17	15.30	16.55	18.72	15.63	17.64	18.70	16.54	16.98	15.31	15.82
Plainfield	15.72	16.01	16.36	15.94	15.84	16.89	15.70	15.93	18.01	16.43	14.08	15.77	14.07
Rahway	16.67	15.50	14.87	17.52	15.50	13.99	13.64	12.51	13.99	14.65	13.12	10.60	11.19
Summit	.....	.....	11.62	11.81	14.28	13.03	12.27	14.12	10.99	13.64	12.01	18.40	11.40
Westfield	.....	.....	.....	.....	.....	.....	.....	.....	12.59	13.56	11.47	12.15	10.52
Phillipsburg	13.68	12.13	14.34	15.04	13.44	15.51	10.03	11.49	14.99	9.85	9.88	15.32	13.06

* The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

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CHART SHOWING RELATIVE MORTALITY IN CERTAIN CITIES OF NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1911.



*The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

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TABLE 9.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1911, FROM TEN SELECTED PREVENTABLE DISEASES, WITH PERCENTAGE OF TOTAL MORTALITY.

NAMES OF DISEASES.	Deaths.	Percentage of total mortality.
Consumption	3,907	10.12
Pneumonia	3,024	7.83
Diarrhœal diseases of children	2,611	6.76
Diphtheria	568	1.47
Typhoid fever	337	.87
Whooping cough	364	.94
Measles	281	.73
Scarlet fever	214	.55
Malarial fever	25	.06
Small-pox	1	.....

TABLE 10.—SHOWING DEATHS FROM CERTAIN SELECTED CAUSES OF DEATH, PER 10,000 INHABITANTS, FOR THE YEARS ENDING DECEMBER 31, 1910, AND DECEMBER 31, 1911; ALSO SHOWING AVERAGE NUMBER OF DEATHS FROM SAID DISEASES DURING PAST THIRTY-THREE YEARS.

DISEASES.	Average number of deaths for thirty-three years.	Deaths per 10,000 inhabitants during year ending December 31st, 1910	Deaths per 10,000 inhabitants during year ending December 31st, 1911.
Consumption	3,424	15.28	14.94
Diarrhoeal diseases of children	2,863	11.54	9.98
Pneumonia*	.....	12.44	11.56
Diseases of heart and circulation	2,429	17.49	17.19
Digestive and intestinal diseases	1,590	10.43	9.13
Diphtheria and croup	1,140	2.87	2.17
Renal and cystic diseases	1,618	11.98	12.10
Violent deaths	1,464	9.96	10.57
Cancer	891	7.24	7.42
Typhoid fever	498	1.55	1.29
Scarlet fever	395	.90	.82
Puerperal	275	1.49	1.63
Whooping cough	245	1.53	1.39
Malarial fever	151	.10	.10
Measles	164	.73	1.07
Erysipelas	91	.44	.37
Acute rheumatism	80	.21	.36
Small-pox	41	.....	.....

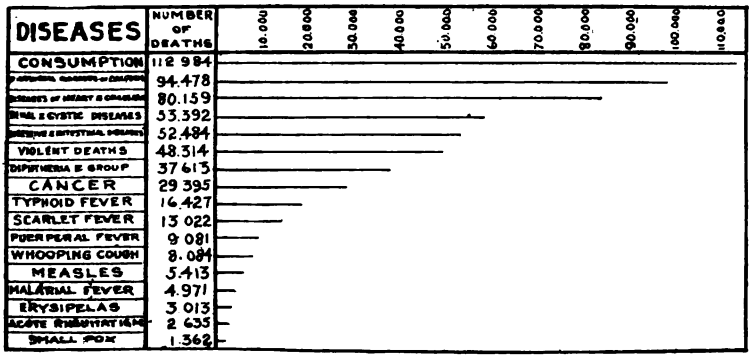
*Deaths from pneumonia were not separately recorded until the year 1901.

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TABLE 11.—SHOWING MORTALITY IN NEW JERSEY, FROM CERTAIN SELECTED CAUSES OF DEATH, FOR THE YEAR ENDING DECEMBER 31, 1911, COMPARED WITH DEATHS FOR THE PREVIOUS YEAR.

SELECTED DISEASES.	Deaths for year ending December 31st, 1910.	Deaths for year ending December 31st, 1911.	Comparative mortality.
Consumption	3,877	3,907	+ 30
Diseases of heart and circulation	4,438	4,497	+ 59
Renal and cystic diseases.	3,039	3,165	+ 126
Digestive and intestinal diseases	2,645	2,389	— 256
Diarrhœal diseases of children	2,929	2,611	— 318
Cancer	1,838	1,942	+ 104
Diphtheria	728	568	— 160
Typhoid fever	392	337	— 55
Scarlet fever.....	229	214	— 15
Puerperal	337	427	+ 50
Whooping cough.....	389	364	— 25
Erysipelas	112	97	— 15
Acute rheumatism.....	54	94	+ 40
Measles	186	281	+ 95
Malarial fever	25	25	.....
Small-pox	.....	1	+ 1

CHART SHOWING DEATHS IN NEW JERSEY, FROM CERTAIN SPECIFIED DISEASES, FOR THE PAST THIRTY-THREE YEARS, ARRANGED IN ORDER OF GREATEST FREQUENCY.



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CONSUMPTION.

In our last report giving the death-rate for the year from consumption we stated that the figure 15.28 was the lowest in the history of this department, covering a period of 32 years, we would add to this statement that the figure for the present year is 14.94, showing a further decrease in the death-rate from this disease.

During the past year the State Board of Health has maintained a campaign of education in various municipalities throughout the state in order that the public may become familiar with the manner in which to prevent tuberculosis, and a resumé of this work will be found elsewhere in this report.

TABLE 12.—DEATHS FROM CONSUMPTION IN NEW JERSEY, BY AGE PERIODS, FOR ELEVEN YEARS.

YEARS.	AGE PERIODS.											Totals.
	Under 1 year.	1 to 10	10 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 to 70	70 to 80	Over 80	Not stated.	
1901	39	73	241	937	827	510	319	199	87	25	....	3,257
1902	39	62	227	842	759	504	281	199	76	19	...7	3,015
1903	49	81	285	941	877	534	310	191	95	16	1	3,380
1904	67	80	315	983	1,005	575	337	217	78	11	2	3,670
1905	40	89	309	972	915	606	335	197	100	23	1	3,587
1906	62	93	309	953	942	646	339	199	84	26	1	3,654
1907	56	61	256	978	967	682	407	229	90	25	....	3,751
1908	36	74	272	983	1,013	602	344	197	80	15	....	3,616
1909	53	68	258	917	976	657	349	220	86	24	....	3,605
1910	46	74	271	987	1,047	723	407	216	81	25	....	3,877
1911	43	76	294	1,012	1,077	661	423	211	98	11	1	3,907

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TABLE 13.—SHOWING NUMBER OF DEATHS AND DEATHS PER 1,000 POPULATION FROM CONSUMPTION IN NEW JERSEY, AND THE PROPORTION OF DEATHS FROM CONSUMPTION TO TOTAL DEATHS DURING THIRTY-THREE YEARS.

YEARS.	Population.*	Total deaths in New Jersey.	Deaths from consumption.	Proportion of deaths from consumption to total deaths.	Deaths from consumption per 10,000 population.
1879	1,020,584	20,444	2,788	13.64	27.32
1880	1,130,892	18,967	2,714	14.30	24.00
1881	1,160,275	20,810	2,989	14.36	25.76
1882	1,189,658	25,910	3,475	13.41	29.21
1883	1,209,048	23,310	3,121	13.39	25.81
1884	1,248,224	21,716	3,215	14.80	25.76
1885	1,278,033	23,087	3,320	13.94	25.19
1886	1,310,431	22,734	3,205	14.10	24.46
1887	1,342,829	24,331	3,653	15.01	27.20
1888	1,375,227	27,173	3,358	12.44	24.42
1889	1,407,625	26,543	3,449	12.99	24.50
1890	1,441,017	28,530	3,669	12.96	25.46
1891	1,478,784	28,840	3,456	11.98	23.37
1892	1,511,653	32,685	3,575	10.94	23.65
1893	1,538,799	30,596	3,429	11.21	22.28
1894	1,578,373	30,004	3,433	11.44	21.75
1895	1,672,942	30,634	3,542	11.56	21.17
1896	1,718,543	30,767	3,358	10.92	19.54
1897	1,764,144	29,822	3,237	10.85	18.35
1898	1,810,008	27,337	3,225	11.79	17.82
1899	1,855,872	30,999	3,584	11.56	19.31
1900	1,883,669	31,474	3,514	11.17	18.64
1901	1,925,781	31,739	3,257	10.26	16.91
1902	1,967,893	33,655	3,015	8.96	15.32
1903	2,016,797	31,820	3,380	10.62	16.76
1904	2,058,909	35,298	3,670	10.40	17.83
1905	2,144,143	33,864	3,587	10.59	16.73
1906	2,196,238	35,670	3,654	10.24	16.64
1907	2,248,331	37,408	3,749	10.02	16.67
1908	2,300,427	35,597	3,616	10.16	15.72
1909	2,352,522	36,359	3,608	9.92	15.34
1910	2,537,167	39,494	3,877	9.82	15.28
1911	2,615,772	38,612	3,907	10.12	14.94

*Estimated except for census years.

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TABLE 14.—SHOWING MORTALITY RATES FROM ALL CAUSES AND FROM CONSUMPTION ONLY, IN MUNICIPALITIES HAVING 5,000 INHABITANTS OR OVER, FOR THE YEAR ENDING DECEMBER 31, 1911, PER 10,000 POPULATION.

	Deaths from all causes per 10,000 population.	Deaths from consumption per 10,000 population.
Atlantic County	164.6	11.32
*Atlantic City	166.3	12.12
Hammonton	129.8	17.18
Bergen County	107.4	10.18
Englewood	135.6	10.65
Garfield	121.0	9.79
Hackensack	148.9	16.39
Ridgewood	122.7	5.26
Rutherford	76.9	5.40
Burlington County	153.1	13.87
Bordentown	189.0	11.67
Burlington	145.3	13.10
Camden County	132.6	17.17
Camden City	168.0	17.26
Gloucester City	134.5	17.45
Cape May County	125.1	7.42
Cumberland County	159.9	13.64
Bridgeton	172.4	20.94
Millville	115.9	13.58
Vineland	195.6	12.91
Essex County	158.9	13.72
Bloomfield	92.7	6.35
East Orange	92.5	9.39
Irvington	124.8	18.72
Montclair	138.6	10.18
Newark	161.3	18.62
Nutley	106.3	3.17
Orange	178.0	16.48
South Orange	104.3	12.84
West Orange	91.4	12.07
Gloucester County	142.0	15.28
Hudson County	226.6	59.92
Bayonne	140.0	9.79
Guttenberg	131.3	6.32
Harrison	130.8	20.22
Hoboken	177.6	20.20
Jersey City	159.5	16.28
Kearny	135.7	9.66
Town of Union	106.7	13.74
West Hoboken	110.2	13.09
West New York	118.6	13.49
Hunterdon County	156.0	14.46
Lambertville	115.6	15.27
Mercer County	107.0	9.43
Princeton	147.3	12.10
Trenton	185.4	18.62
Middlesex County	123.1	9.55
New Brunswick	202.2	15.79
Perth Amboy	140.3	8.99
Roosevelt	150.4	8.64
South Amboy	138.3	11.18
Monmouth County	143.1	12.25
*Asbury Park	128.6	13.30
*Long Branch	210.0	14.80
Red Bank	150.8	14.43
Morris County	154.5	14.70
Dover	127.4	9.10
Morristown	232.9	16.69
Ocean County	130.8	11.68
Passaic County	106.9	10.71
Passaic City	142.7	10.49
Paterson	147.3	16.66
Salem County	123.0	12.20
Salem City	156.4	12.03
Somerset County	127.2	7.86
North Plainfield	132.5	8.04
Somerville	191.6	13.68
Sussex County	134.7	10.92
Union County	105.9	9.18
Elizabeth	158.2	12.27
Plainfield	140.7	12.88
Rahway	111.9	9.50
Summit	114.0	15.72
Westfield	105.2	6.01
Warren County	145.6	7.74
Phillipsburg	130.6	6.42

*The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

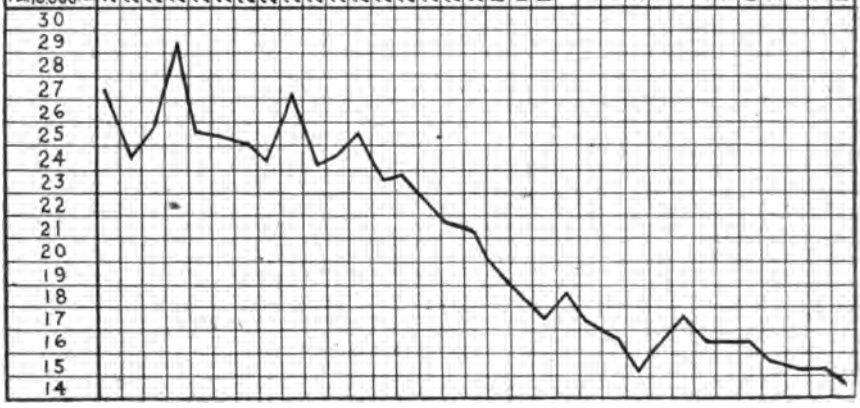
TABLE 15.—SHOWING AVERAGE ANNUAL DEATH-RATES FROM ALL CAUSES AND AVERAGE ANNUAL DEATH-RATES FROM CONSUMPTION IN NEW JERSEY FOR THIRTY-THREE YEARS, BY COUNTIES, COMPARED WITH DEATH-RATES FROM ALL CAUSES AND DEATH-RATES FROM CONSUMPTION, FOR THE YEAR ENDING DECEMBER 31, 1911, PER 10,000 POPULATION.

COUNTIES.	AVERAGES PER YEAR.			
	Average annual death-rate from all causes per 10,000 population for thirty-three years.	Average annual death-rate from consumption per 10,000 population for thirty-three years.	Death-rate per 10,000 population from all causes for year ending Dec. 31, 1911.	Death-rate from consumption per 10,000 population for year ending Dec. 31, 1911.
Atlantic County	169.3	16.32	163.3	12.25
Bergen County	96.3	13.93	113.7	10.37
Burlington County	154.9	17.53	154.4	13.64
Camden County	185.2	21.69	156.2	17.25
Cape May County	138.5	13.55	125.1	7.42
Cumberland County	81.4	19.24	160.3	15.42
Essex County	188.3	25.08	144.0	16.50
Gloucester County	144.6	16.93	142.0	15.28
Hudson County	208.2	24.51	155.9	18.42
Hunterdon County	136.3	14.61	150.5	14.57
Mercer County	174.0	21.78	169.1	16.63
Middlesex County	160.1	16.48	146.0	10.69
Monmouth County	151.6	16.24	151.4	12.90
Morris County	108.4	19.38	164.7	14.46
Ocean County	143.4	18.98	130.8	11.68
Passaic County	180.7	20.73	139.3	14.07
Salem County	144.4	18.34	131.2	12.16
Somerset County	141.7	14.97	136.5	8.64
Sussex County	127.1	14.55	134.7	10.92
Union County	135.1	15.13	139.2	11.60
Warren County	146.4	14.36	140.8	7.32
The State	172.9	20.42	147.6	14.94

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CHART SHOWING DEATHS FROM CONSUMPTION IN NEW JERSEY, PER 10,000 POPULATION, FOR THE THIRTY-THREE YEARS, ENDING DECEMBER 31, 1911.

YEAR	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
DEATHS FOR PER 10,000 POP.	27.32	24.00	25.76	29.21	25.81	25.76	25.19	24.46	27.20	24.42	24.50	25.46	23.37	23.65	22.28	21.75	21.17	19.54	18.35	17.82	19.31	18.64	16.91	15.32	16.76	17.83	16.73	16.64	16.67	15.72	15.34	15.28	14.94



PNEUMONIA.

The mortality from pneumonia in New Jersey for the past year was less than for the preceding year, and the death-rate, 11.56, for the calendar year 1911, is lower than for any period during the past nine years.

TABLE 16.—SHOWING DEATHS IN NEW JERSEY FROM PNEUMONIA, WITH AGE AT DEATH, FOR THE YEAR ENDING DECEMBER 31, 1911.

DEATHS FROM PNEUMONIA	AGE PERIODS.																					Total.
	Under 1 mo.	Under 1 year.	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 70	70 to 80	80 to 90	Over 90.	Not stated.			
	100	441	405	50	30	52	82	94	86	136	132	151	158	161	406	851	170	20				3024

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TABLE 17.—SHOWING DEATHS FROM PNEUMONIA IN CITIES OF OVER 5,000 INHABITANTS, IN NEW JERSEY, BY MONTHS, FOR THE NINE YEARS ENDING DECEMBER 31, 1911, AND DEATH RATES PER 10,000 INHABITANTS, FOR EACH OF SAID YEARS.

YEARS.	Estimated population of cities of over 5,000 inhabitants.	MONTHS.												Totals	Death-rate per 10,000 inhabitants.
		Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.		
1903 ..	1,363,464	271	288	261	128	155	67	98	58	75	91	202	278	1,972	14.46
1904 ..	1,370,719	401	350	294	315	241	134	42	61	72	108	187	289	2,584	18.85
1905 ..	1,429,100	309	271	251	190	178	96	75	73	69	121	199	209	2,041	14.28
1906 ..	1,505,142	340	286	241	175	189	86	80	69	89	127	178	285	2,245	14.92
1907 ..	1,546,574	361	290	333	235	214	144	100	64	93	142	162	364	2,502	16.18
1908 ..	1,584,217	329	279	252	178	174	80	66	73	89	154	149	269	2,092	13.21
1909 ..	1,622,851	301	254	314	299	208	104	67	52	95	142	203	286	2,325	14.32
1910 ..	1,742,584	357	224	297	273	191	123	69	76	84	103	185	332	2,314	13.28
1911 ..	1,844,646	371	280	333	274	141	78	60	90	70	120	181	210	2,208	11.97

TABLE 18.—SHOWING DEATHS AND DEATH RATES FROM PNEUMONIA IN NEW JERSEY FOR ELEVEN YEARS, 1901-1911.

YEARS.	Deaths from pneumonia.	Deaths from pneumonia per 10,000 inhabitants.
1901	2,539	13.18
1902	2,421	12.30
1903	2,628	13.03
1904	3,486	16.93
1905	2,764	12.89
1906	3,117	14.19
1907	3,307	14.70
1908	2,773	12.05
1909	3,094	13.15
1910	3,156	12.44
1911	3,024	11.56

DEATHS AMONG CHILDREN.

The figures showing the number of deaths in New Jersey among children under five years of age are considerably lower than for the preceding year.

Reference to table 19, which follows, will show the total number of deaths among children under five years of age from 1901 to the present date, together with the death-rate per 10,000 population.

It will be noticed that the rate for the past year is lower than for any period during the past eleven years.

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TABLE 19.—SHOWING NUMBER OF DEATHS IN NEW JERSEY; DEATHS AMONG CHILDREN UNDER FIVE YEARS OF AGE; DEATHS UNDER FIVE YEARS FROM DIARRHOEAL DISEASES, AND DEATHS UNDER FIVE YEARS PER 10,000 INHABITANTS, FOR THE ELEVEN YEARS ENDING DECEMBER 31, 1911.

	NEW JERSEY.										
DEATHS.	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Total deaths	31,739	31,319	31,820	35,298	35,864	35,670	37,408	35,597	36,359	39,494	38,612
Deaths under five years	9,549	9,302	9,950	10,913	9,864	11,246	10,867	10,869	11,137	11,648	10,740
Deaths under five years from diarrhoea	1,787	1,857	1,603	2,354	2,290	2,365	2,453	2,561	2,350	2,929	2,611
Percentage of deaths under five years to total deaths	30.09	31.30	31.27	30.93	29.13	31.53	29.05	30.53	30.63	29.49	27.82
Deaths under five years per 10,000 population	49.59	49.81	44.34	53.00	46.00	51.21	48.88	47.25	47.34	45.91	41.06

TABLE 20.—SHOWING DEATHS AMONG CHILDREN UNDER FIVE YEARS OF AGE IN NEW JERSEY PER 10,000 POPULATION FOR THIRTY-THREE YEARS.

YEARS.	Deaths under 1 year per 10,000 population.	Deaths from 1 to 5 years per 10,000 population.	YEARS.	Deaths under 1 year per 10,000 population.	Deaths from 1 to 5 years per 10,000 population.
1879	45.58	33.97	1896	43.99	24.43
1880	40.38	25.12	1897	40.16	20.00
1881	39.90	25.75	1898	35.91	15.83
1882	49.88	38.48	1899	38.22	17.04
1883	44.48	28.22	1900	37.05	18.44
1884	41.04	22.82	1901	36.11	13.48
1885	44.69	26.67	1902	36.18	13.63
1886	41.31	23.83	1903	37.08	15.38
1887	43.56	25.29	1904	36.18	16.82
1888	47.51	28.90	1905	32.42	13.59
1889	48.61	24.95	1906	35.39	15.81
1890	49.38	25.38	1907	34.39	13.94
1891	46.90	25.36	1908	34.01	13.24
1892	52.74	29.08	1909	32.55	14.79
1893	49.22	24.26	1910	32.92	12.99
1894	49.75	22.97	1911	29.22	11.84
1895	45.67	21.79			

TABLE 21.—SHOWING DEATHS IN NEW JERSEY FROM DIARRHOEAL DISEASES OF CHILDREN, WITH AGES AT DEATH, COMPARED WITH DEATHS FROM ALL CAUSES AMONG CHILDREN UNDER FIVE YEARS OF AGE, FOR YEAR ENDING DECEMBER 31, 1911.

AGE PERIODS.	Deaths from diarrhœal diseases.	Deaths from all causes among children under five years of age.
Under one month	215	2,801
Over one month and under one year	1,917	4,841
One to five	479	3,098
Total	2,611	10,740

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TABLE 23.—SHOWING DEATHS IN CERTAIN CITIES OF NEW JERSEY, ALSO DEATHS AMONG CHILDREN UNDER FIVE YEARS OF AGE; DEATHS UNDER FIVE YEARS FROM DIARRHOEA AND DEATHS UNDER FIVE YEARS PER 10,000 INHABITANTS.

DEATHS.	NEWARK.				
	1907	1908	1909	1910	1911
Total deaths	5,736	5,198	5,516	5,784	5,451
Deaths under five years	1,666	1,640	1,742	1,775	1,572
Deaths under five years from diarrhoea	370	344	340	361	414
Percentage of deaths under five years to total deaths	29.04	31.55	31.58	30.69	28.84
Deaths under five years per 10,000 population	55.67	53.66	55.64	61.08	48.63

DEATHS.	JERSEY CITY.				
	1907	1908	1909	1910	1911
Total deaths	4,723	4,428	4,404	4,407	4,384
Deaths under five years	1,456	1,331	1,541	1,338	1,318
Deaths under five years from diarrhoea	371	375	332	390	328
Percentage of deaths under five years to total deaths	30.83	30.06	34.99	30.35	30.06
Deaths under five years per 10,000 population	59.87	53.57	60.74	49.78	47.96

DEATHS.	PATERSON.				
	1907	1908	1909	1910	1911
Total deaths	1,839	1,867	1,888	1,850	1,891
Deaths under five years	523	559	526	519	431
Deaths under five years from diarrhoea	126	126	108	142	89
Percentage of deaths under five years to total deaths	28.44	29.94	27.86	28.05	22.79
Deaths under five years per 10,000 population	45.85	48.46	45.11	41.32	33.56

DEATHS.	CAMDEN.				
	1907	1908	1909	1910	1911
Total deaths	1,506	1,471	1,480	1,627	1,626
Deaths under five years	455	433	443	538	502
Deaths under five years from diarrhoea	84	57	88	102	103
Percentage of deaths under five years to total deaths	30.21	32.83	29.93	33.07	30.87
Deaths under five years per 10,000 population	52.70	55.00	49.61	55.95	51.87

DEATHS.	HOBOKEN.				
	1907	1908	1909	1910	1911
Total deaths	1,556	1,266	1,241	1,329	1,266
Deaths under five years	481	405	400	360	335
Deaths under five years from diarrhoea	88	105	87	85	61
Percentage of deaths under five years to total deaths	30.91	32.00	32.23	27.09	30.41
Deaths under five years per 10,000 population	70.38	58.59	56.86	51.19	54.00

DEATHS.	TRENTON.				
	1907	1908	1909	1910	1911
Total deaths	1,599	1,625	1,661	1,969	1,842
Deaths under five years	418	523	500	655	587
Deaths under five years from diarrhoea	103	95	108	183	128
Percentage of deaths under five years to total deaths	26.14	32.18	30.10	33.27	31.87
Deaths under five years per 10,000 population	47.22	57.66	53.83	67.65	59.09

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TABLE 22.—SHOWING TOTAL DEATHS, DEATHS UNDER FIVE YEARS, PERCENTAGE PER 10,000 INHABITANTS, FOR CERTAIN CITIES OF NEW JERSEY HAVING

NAME OF PLACE.	1907.				1908.			
	Total deaths.	Deaths under five years.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 population.	Total deaths.	Deaths under five years.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 population.
Atlantic City	699	162	23.18	39.04	656	149	22.71	34.30
Bayonne	763	345	45.22	76.87	722	335	46.40	69.81
Bloomfield	145	47	32.41	37.70	158	54	34.18	41.96
Bridgeton	239	43	17.99	31.83	180	43	23.89	31.97
Burlington	155	38	24.52	45.81	157	43	30.57	66.97
Camden	1,506	455	30.21	41.12	1,471	493	33.51	56.14
Dover	104	27	25.96	41.42	88	25	28.41	37.87
East Orange	297	60	20.20	22.52	278	64	23.02	23.38
Elizabeth	1,194	421	35.26	65.92	1,084	396	36.53	60.42
Englewood	143	34	23.78	39.58	126	33	26.19	36.98
Gloucester City	167	65	38.92	76.10	172	67	38.95	76.28
Hackensack	218	68	31.19	57.82	170	50	29.41	41.35
Harrison	264	99	37.50	72.19	223	94	42.15	66.39
Hoboken	1,556	481	30.91	70.83	1,266	405	31.99	58.59
Irvington	114	25	21.92	31.45	99	22	22.22	26.39
Jersey City	4,723	1,456	30.83	59.87	4,428	1,321	30.06	53.57
Kearny	213	52	24.41	35.42	237	64	27.00	42.04
Long Branch	288	70	24.31	45.18	227	51	22.47	35.99
Millville	174	52	29.89	41.93	187	55	29.41	43.44
Montclair	291	93	31.95	53.65	235	59	25.11	33.12
Morristown	281	83	29.53	66.41	267	83	31.09	65.49
Newark	5,736	1,666	29.04	55.37	5,198	1,640	31.55	53.66
New Brunswick	468	163	34.82	66.85	454	164	36.12	65.53
North Plainfield	87	21	24.14	35.84	54	11	20.37	18.39
Orange	513	132	25.73	49.10	525	166	31.62	60.86
Passaic City	808	409	50.62	97.70	762	385	50.52	87.75
Paterson	1,839	523	28.44	45.85	1,867	559	29.94	48.46
Perth Amboy	399	198	49.62	67.87	295	218	35.19	70.75
Phillipsburg	220	85	38.64	57.93	151	42	27.81	27.39
Plainfield	358	86	24.02	43.64	334	72	21.56	35.42
Rahway	125	22	16.30	24.62	133	17	12.78	18.73
Red Bank	91	30	32.97	45.48	85	14	16.47	20.70
Salem City	109	24	22.02	35.88	118	36	30.51	52.77
South Amboy	105	37	35.24	59.47	90	36	40.00	58.04
Summit	85	21	24.71	28.17	106	19	17.92	24.45
Town of Union	291	94	32.30	53.01	294	79	26.87	43.66
Trenton	1,599	418	26.14	47.22	1,625	523	32.18	57.66
West Hoboken	371	129	34.77	40.98	401	138	34.41	42.23
West New York	136	63	46.32	79.07	141	47	33.33	56.27
West Orange	95	29	30.53	35.09	106	36	33.96	42.54

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OF DEATHS UNDER FIVE YEARS TO TOTAL DEATHS AND DEATHS UNDER FIVE YEARS OVER 5,000 POPULATION FOR THE FIVE YEARS ENDING DECEMBER 31, 1911.

1909.				1910.				1911.			
Total deaths.	Deaths under five years.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 population.	Total deaths.	Deaths under five years.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 population.	Total deaths.	Deaths under five years.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 population.
679	161	23.71	35.46	800	213	26.63	46.15	796	159	19.97	33.22
678	300	44.25	60.13	827	355	42.93	63.91	815	369	45.28	63.40
152	40	26.32	30.15	168	45	26.79	29.86	146	38	26.03	24.13
210	49	23.33	36.59	216	40	18.52	28.15	247	44	17.81	30.71
134	45	33.58	52.60	150	51	34.00	61.18	122	35	20.49	29.78
1,480	443	29.93	49.61	1,627	538	33.07	55.85	1,626	502	30.87	51.87
111	36	32.43	53.85	100	34	34.00	45.53	98	22	22.45	28.60
322	57	17.70	20.28	370	65	17.57	18.91	325	58	17.31	16.02
1,141	459	40.23	68.29	1,124	388	34.52	52.85	1,202	407	33.86	53.56
135	50	37.04	54.03	156	32	20.51	32.25	140	19	13.57	18.49
162	63	38.89	69.79	147	58	39.46	61.80	131	37	28.24	37.97
191	51	26.70	41.06	228	72	31.58	51.25	218	60	27.52	40.93
180	70	38.89	47.93	237	103	43.46	71.04	194	78	40.21	52.58
1,241	400	32.23	56.86	1,229	360	27.09	51.19	1,266	385	30.41	54.00
127	32	25.20	36.70	142	32	22.54	26.94	160	30	18.75	23.41
4,404	1,541	34.90	60.74	4,407	1,333	30.25	49.78	4,384	1,318	30.06	47.96
207	37	17.87	23.47	276	56	20.29	30.01	267	63	23.60	32.03
262	52	19.85	35.06	292	56	19.18	42.11	284	51	17.96	37.72
151	46	30.46	35.59	149	41	27.25	32.98	166	36	21.69	28.65
277	85	30.69	46.46	324	119	36.73	55.22	313	81	25.87	35.86
254	72	28.85	56.04	296	74	25.00	59.17	293	74	25.26	58.33
5,516	1,742	31.58	55.64	5,784	1,775	30.69	51.08	5,451	1,572	28.84	43.63
487	197	40.45	76.85	496	169	34.07	72.26	474	168	35.44	71.68
65	12	18.46	19.67	78	17	21.79	27.79	83	21	25.30	33.78
447	137	30.65	49.51	525	153	29.14	51.64	540	161	29.81	53.07
783	435	55.56	94.80	819	412	50.31	75.22	830	486	52.53	74.97
1,888	526	27.86	45.11	1,850	519	28.05	41.32	1,891	431	22.79	33.56
432	229	53.01	70.57	507	256	50.49	79.70	468	240	51.28	71.93
158	31	19.62	19.38	213	72	33.80	51.79	183	55	30.05	39.25
295	72	24.41	24.37	324	76	23.46	26.98	295	58	19.66	27.66
121	28	23.14	20.37	99	21	21.21	22.49	106	23	21.70	24.27
102	32	31.37	46.17	113	29	25.66	39.20	115	36	31.30	47.21
91	26	28.57	37.43	94	22	23.40	33.26	104	24	23.08	36.10
94	34	36.17	54.97	103	31	28.70	44.24	99	33	33.33	46.11
97	30	30.93	37.13	138	27	19.56	26.00	87	18	20.69	23.59
277	69	24.91	37.33	252	96	38.10	45.66	223	70	30.04	32.07
1,661	500	30.10	53.83	1,969	655	33.27	67.65	1,843	587	31.87	59.09
420	160	38.10	47.24	386	106	27.46	29.94	404	134	33.17	36.55
152	55	36.18	62.94	169	70	41.42	51.62	176	60	34.09	40.45
116	31	26.72	35.81	95	32	33.68	29.14	106	32	30.19	27.53

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TABLE 24.—SHOWING DEATHS IN NEW JERSEY UNDER FIVE YEARS OF AGE PER 10,000 POPULATION FOR THIRTY-THREE YEARS, TOGETHER WITH AVERAGES FOR THE NINETEEN YEARS, 1879-1897, AND ALSO FOR THE FOURTEEN YEARS, 1898-1911.

YEARS.	Deaths under five years per 10,000 population.	YEARS.	Deaths under five years per 10,000 population.
1879	75.55	1898	51.74
1880	65.50	1899	55.26
1881	65.65	1900	55.49
1882	88.36	1901	49.59
1883	72.70	1902	49.81
1884	63.86	1903	52.46
1885	71.36	1904	53.00
1886	65.14	1905	46.01
1887	68.85	1906	51.21
1888	76.41	1907	48.33
1889	73.56	1908	47.25
1890	74.74	1909	47.34
1891	72.26	1910	45.91
1892	81.82	1911	41.06
1893	73.48		
1894	72.72		
1895	67.46		
1896	68.42		
1897	60.16		
Average death-rate for nineteen years ending 1897	71.69	Average death-rate for fourteen years ending 1911	49.60

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TABLE 25.—SHOWING PERCENTAGE OF DEATHS UNDER FIVE YEARS TO TOTAL DEATHS, AND DEATHS UNDER FIVE YEARS PER 10,000 INHABITANTS FOR CERTAIN CITIES OF NEW JERSEY HAVING OVER 5,000 POPULATION, FOR THE YEAR ENDING DECEMBER 31, 1911.

NAMES OF CITIES.	Percentage of deaths under five years to total deaths.	Deaths under five years per 10,000 inhabitants.
Atlantic City	19.97	33.22
Hammonton	27.94	36.27
Englewood	13.57	18.40
Garfield	52.94	64.07
Hackensack	27.52	40.98
Ridgewood	15.71	19.29
Rutherford	22.81	17.54
Bordentown	18.52	35.01
Burlington	20.49	29.78
Camden	30.87	51.87
Gloucester	28.24	37.97
Bridgeton	17.81	30.71
Millville	21.69	28.65.
Vineland	24.53	47.97
Bloomfield	26.03	24.13
East Orange	17.31	16.02
Irvington	18.75	23.41
Montclair	25.87	35.86
Newark	28.84	43.63
Nutley	37.31	39.68
Orange	29.81	53.07
South Orange	23.08	24.08
West Orange	30.19	27.58
Bayonne	45.28	63.40
Guttenberg	44.16	57.98
Harrison	40.21	52.59
Hoboken	30.41	54.00
Jersey City	30.06	47.96
Kearny	23.60	32.03
Town of Union	30.04	32.07
West Hoboken	33.17	36.55
West New York	34.09	40.45
Lambertville	11.32	13.09
Princeton	13.70	20.17
Trenton	31.87	59.09
New Brunswick	35.44	71.68
Perth Amboy	51.28	71.93
Roosevelt	65.52	98.51
South Amboy	33.33	46.11
Asbury Park	20.00	25.72
Long Branch	17.96	37.72
Red Bank	31 30	47.21
Dover	22.45	28.60
Morristown	25.26	58.83
Passaic	52.53	74.97
Paterson	22.79	33.56
Salem	23.06	36.10
North Plainfield	25.30	33.78
Somerville	16.33	31.27
Elizabeth	33.86	53.56
Plainfield	19.66	27.66
Rahway	21.70	24.27
Summit	20.69	23.59
Westfield	28.57	30.07
Phillipsburg	30.05	39.25

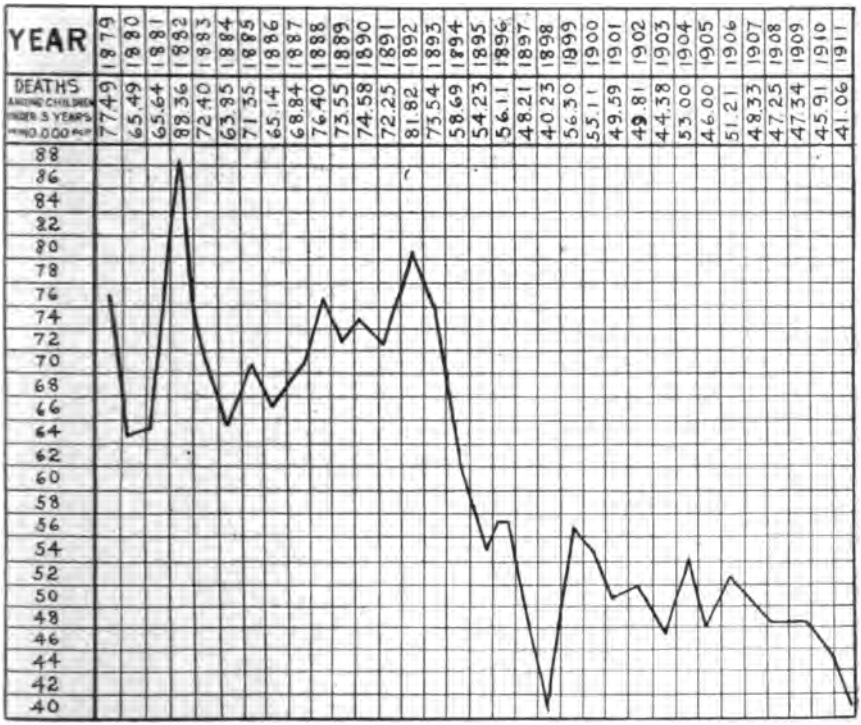
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TABLE 26.—SHOWING NUMBER OF DEATHS IN NEW JERSEY AMONG CHILDREN UNDER FIVE YEARS OF AGE IN MANUFACTURING DISTRICTS, AND ALSO IN COUNTIES OUTSIDE OF THE LARGER TOWNS, WITH COMPARATIVE MORTALITY.

NAMES OF MANUFACTURING TOWNS.	Estimated population.	Number of deaths occurring in children under five years of age.	Number of deaths of children under five years of age for each 1,000 of population.	Estimated population of counties outside of larger cities.	Number of deaths occurring in children under five years of age in counties outside of larger cities.	Number of deaths of children under five years of age for each 1,000 of population in counties outside of larger cities.
Bayonne (Hud. Co.)	58,202	369	6.34	36.714	137	3.73
Beverly (Bur. Co.)	2,116	11	5.20	54,789	194	3.54
Boonton (Morris Co.)	5,129	12	2.34	55,788	158	2.83
Bordentown (Bur. Co.) ..	4,285	15	3.50	54,789	194	3.54
Bound Brook (Som. Co.)	4,086	15	3.67	27,997	88	3.14
Bridgeton (Cumb. Co.)...	14,326	44	3.07	23,452	72	3.07
Burlington (Bur. Co.) ..	8,396	25	2.98	54,789	194	3.54
Camden (Cam. Co.)	96,773	502	5.19	39,608	107	2.70
Carlstadt (Ber. Co.)	2,943	16	4.05	96,288	288	2.99
Elizabeth (U. Co.)	75,989	407	5.36	24,082	73	3.03
Garfield (Ber. Co.)	11,237	73	6.41	96,288	288	2.99
Gloucester City (Cam. Co.)	9,743	131	3.80	39,608	107	2.70
Hoboken (Hud. Co.)	71,295	385	5.40	36,714	137	3.73
Jersey City (Hud. Co.) ..	274,795	1,318	4.80	36,714	137	3.73
Lambertville (Hunt. Co.)..	4,585	6	1.31	29,046	62	2.13
Lodi (Ber. Co.)	4,407	19	4.31	96,288	288	2.99
Millburn (Essex Co.)	3,828	9	2.35	31,343	90	2.87
Milltown (Mdx. Co.)	1,659	2	1.21	48,156	208	4.32
Millville (Cumb. Co.)	12,564	36	2.87	23,452	72	3.07
Newark (Essex Co.)	360,305	1,572	4.36	31,343	90	2.87
New Brunswick (Mdx. Co.)	23,439	168	7.17	48,156	208	4.32
Orange (Essex Co.)	30,336	161	5.31	31,343	90	2.87
Passaic City (Pas. Co.) ..	58,160	436	7.50	37,337	127	3.40
Paterson (Pas. Co.)	128,414	431	3.36	37,337	127	3.40
Perth Amboy (Mdx. Co.).	33,366	240	7.20	48,156	208	4.32
Phillipsburg (W. Co.)....	14,013	55	3.93	29,731	87	2.93
Plainfield (U. Co.)	20,966	58	2.77	24,082	73	3.03
Rahway (U. Co.)	9,475	23	2.43	24,082	73	3.03
Raritan (Som. Co.)	3,616	22	6.08	27,997	88	3.14
Riverton Bor. (Bur. Co.).	1,834	10	5.45	54,789	194	3.54
Salem City (Salem Co.)..	6,648	24	3.61	30,493	55	2.68
South River (Mdx. Co.)...	5,009	7	1.40	48,156	208	4.32
Town of Union (Hud. Co.)	21,827	70	3.21	36,714	137	3.73
Trenton (Mer. Co.)	99,342	587	5.91	24,386	42	1.76
Vineland (Cumb. Co.) ...	5,420	26	4.80	23,452	72	3.07
Wharton (Mor. Co.)	3,123	13	4.16	55,788	158	2.83

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CHART SHOWING DEATHS IN NEW JERSEY AMONG CHILDREN UNDER FIVE YEARS OF AGE, PER 10,000 POPULATION, FOR THIRTY THREE YEARS.



DIPHTHERIA.

The number of deaths and the death-rate from diphtheria for the present year is lower than for any period of which this department has record.

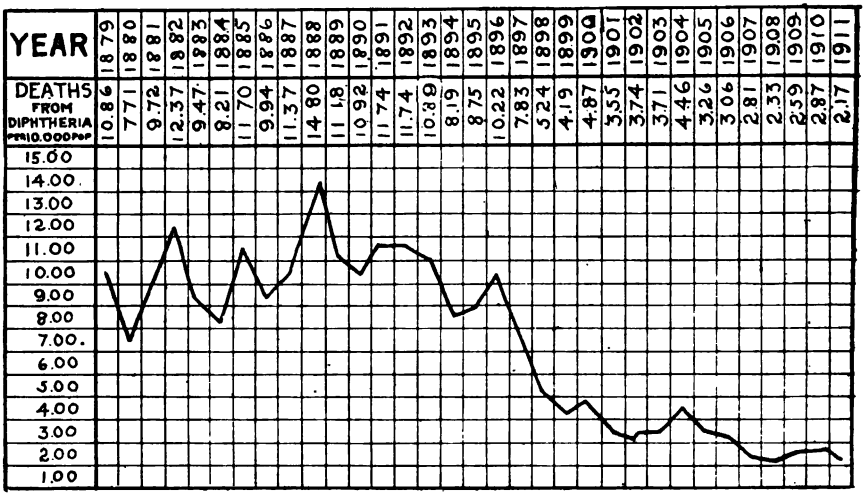
The facilities afforded by the State Laboratory of Hygiene for quick examination of specimens in cases of suspected diphtheria, together with the proper use of anti-toxin has been the means of lowering the death-rate from diphtheria to the present figure, and we hope that future years will show a still further decrease in the death-rate from this disease.

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TABLE 27.—SHOWING DEATHS IN NEW JERSEY FROM DIPHTHERIA WITH AGES OF DECEDENTS, FOR YEAR ENDING DECEMBER 31, 1911.

AGE PERIODS.	Deaths from Diphtheria.	AGE PERIODS.	Deaths from Diphtheria.	AGE PERIODS.	Deaths from Diphtheria.
Under 1 month ..	2	25 to 30....	4	60 to 70.....	1
Under 1 year	38	30 to 35....	4	70 to 80.....	.....
1 to 5	325	35 to 40....	4	80 to 90.....	.....
5 to 10	146	40 to 45....	2	Over 90.....	.....
10 to 15	27	45 to 50....	2	Not stated....	.....
15 to 20	4	50 to 55....	1	.....	.....
20 to 25	7	55 to 60....	1	Total.....	568

CHART SHOWING DEATHS FROM DIPHTHERIA PER 10,000 POPULATION, IN NEW JERSEY, FOR THE THIRTY-THREE YEARS ENDING DECEMBER 31, 1911.



TYPHOID FEVER.

The number of deaths from typhoid fever for the year ending Dec. 31, 1911, was 337, a decrease of 55 from the previous year, and the death-rate, .13, shows a decrease of .03 per 1,000 population from the year 1910.

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TABLE 28.—SHOWING COMPARATIVE DEATH-RATES FROM TYPHOID FEVER, PER 10,000 INHABITANTS, IN THE REGISTRATION AREA OF THE UNITED STATES AND IN NEW JERSEY, FOR THE ELEVEN YEARS ENDING DECEMBER 31, 1911.

	DEATHS FROM TYPHOID FEVER, PER 10,000 INHABITANTS.										
	Annual average, 1901-1911.	1901.	1902.	1903	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.
Registration area of United States	2.94	3.24	3.44	3.43	3.19	2.81	3.21	3.03	2.53	2.20	2.35	2.10
New Jersey	1.78	1.83	2.17	1.92	1.87	1.68	1.86	2.06	1.60	1.28	1.55	1.29

TABLE 29.—SHOWING DEATHS PER 10,000 POPULATION FROM TYPHOID FEVER IN NEW JERSEY FOR THIRTY-THREE YEARS.

YEAR.	Population.*	Number of deaths from typhoid fever.	Deaths from typhoid fever, per 10,000 inhabitants	YEAR.	Population.*	Number of deaths from typhoid fever.	Deaths from typhoid fever, per 10,000 inhabitants
1879	1,020,584	324	3.17	1895..	1,672,942	568	3.39
1880	1,130,892	373	3.29	1896..	1,718,543	577	3.35
1881	1,160,275	574	4.94	1897..	1,764,141	458	2.70
1882	1,189,658	884	7.43	1898..	1,810,008	450	2.48
1883	1,209,048	564	4.66	1899..	1,855,872	486	2.62
1884	1,248,224	640	5.12	1900..	1,883,669	356	1.87
1885	1,278,033	642	5.02	1901..	1,925,781	352	1.93
1886	1,310,431	545	4.15	1902..	1,967,893	428	2.17
1887	1,342,829	522	3.88	1903..	2,016,797	388	1.92
1888	1,375,227	620	4.50	1904..	2,058,909	384	1.87
1889	1,407,625	724	5.14	1905..	2,144,143	360	1.68
1890	1,441,017	783	5.42	1906..	2,196,238	408	1.86
1891	1,478,784	695	4.69	1907..	2,248,331	464	2.06
1892	1,511,653	638	3.15	1908..	2,300,427	367	1.60
1893	1,538,799	506	3.28	1909..	2,352,522	301	1.28
1894	1,578,373	485	3.07	1910..	2,537,167	392	1.55
				1911..	2,615,772	337	1.29

* Population estimated except for census years.

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TABLE 30.—SHOWING DEATHS FROM TYPHOID FEVER IN NEW JERSEY, PER 10,000 POPULATION, BY COUNTIES, FOR THE ELEVEN YEARS ENDING DECEMBER 31, 1911, WITH AVERAGES FOR ELEVEN YEARS.

COUNTIES.	YEARS. 1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	Averages for eleven years.
Atlantic County	2.67	2.74	2.81	1.97	2.01	1.60	2.30	1.62	1.13	1.53	2.15	2.05
Bergen County	.99	1.08	1.16	1.24	1.10	1.15	1.29	.71	.85	1.16	.69	1.04
Burlington County	2.58	2.23	3.61	2.89	2.58	3.18	4.41	4.04	2.00	3.31	1.33	2.92
Camden County	2.11	2.44	1.07	2.46	1.81	2.98	2.99	2.00	1.28	1.97	1.23	2.03
Cape May County	2.26	.60	.75	.....	1.73	1.65	2.62	.50	1.45	1.52	.49	1.23
Cumberland County	1.94	2.32	.96	2.29	2.88	1.15	2.29	1.71	1.32	1.99	1.43	1.84
Essex County	1.93	2.12	2.04	1.41	1.39	1.79	2.00	1.16	1.22	1.21	1.03	1.57
Gloucester County	2.81	2.17	2.16	1.54	1.16	3.14	1.41	1.39	1.09	1.61	3.43	1.99
Hudson County	1.74	1.86	1.66	1.99	2.66	1.71	1.58	1.11	.78	.93	.97	1.54
Hunterdon County	1.45	2.03	1.74	1.45	.90	1.80	2.44	.62	.62	1.49	.30	1.35
Mercer County	1.75	6.04	5.14	3.87	2.35	3.26	6.69	4.43	3.10	4.14	3.89	4.06
Middlesex County	1.47	1.95	1.05	2.63	1.55	.70	1.92	1.68	1.17	.96	1.19	1.48
Monmouth County	1.92	2.36	1.63	1.95	2.62	2.47	1.99	2.41	2.16	2.22	2.91	2.24
Morris County	1.06	1.21	1.75	1.09	2.21	1.75	1.01	.72	1.14	1.34	.92	1.27
Ocean County	1.00	2.98	.49	2.43	3.35	.95	1.41	.....	.92	3.28	1.40	1.66
Passaic County	2.19	2.50	2.02	.75	1.14	1.33	1.19	1.06	.99	1.16	.76	1.37
Salem County	.....	1.96	1.96	3.53	2.28	3.03	1.51	2.62	1.49	1.48	2.58	2.04
Somerset County	.60	.59	1.16	.86	2.48	1.35	.27	2.35	2.31	1.80	3.32	1.55
Sussex County	.41	2.51	.80	1.97	.43	1.71	1.29	3.94	1.32	1.87	.73	1.54
Union County	2.64	2.57	2.32	1.99	1.37	1.66	1.37	2.19	1.67	1.71	.83	1.35
Warren County	1.85	4.74	1.05	2.35	1.73	1.95	1.43	.71	1.18	2.78	.69	1.86
The State	1.83	2.17	1.92	1.87	1.68	1.86	2.06	1.60	1.28	1.55	1.29	1.74

TABLE 31.—SHOWING DEATHS FROM TYPHOID FEVER IN NEW JERSEY, FOR YEAR ENDING DECEMBER 31, 1911, AND SHOWING ALSO THE NUMBER OF DEATHS FROM THIS DISEASE IN URBAN AND RURAL DISTRICTS, TOGETHER WITH POPULATION AND DEATHS PER 10,000 INHABITANTS.

	Aggregate population.	Deaths from typhoid fever.	Deaths from typhoid fever per 10,000 population.
State	2,615,772	337	1.29
Cities	1,844,646	241	1.31
Rural Districts	771,126	96	1.24

TABLE 32.—DEATHS FROM TYPHOID FEVER IN NEW JERSEY, BY AGE PERIODS, FOR ELEVEN YEARS.

YEARS	AGE PERIODS. Under 1 year.	1 to 10.	10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	Over 80.	Not stated.	Totals.
1901	2	35	57	107	74	36	17	13	9	1	1	352
1902	1	25	72	124	92	53	33	13	8	1	1	423
1903	3	26	77	108	88	49	19	17	....	.....	1	388
1904	2	24	77	108	83	31	35	16	5	3	.....	384
1905	3	33	73	86	65	49	28	16	6	1	.....	360
1906	1	34	85	110	67	59	28	11	10	3	.....	408
1907	.....	22	95	149	93	61	27	11	4	2	.....	464
1908	3	36	71	96	73	39	25	16	6	2	.....	367
1909	8	20	63	68	59	47	23	7	6	.....	.....	301
1910	1	22	71	108	85	53	32	13	6	1	.....	392
1911	1	18	74	93	61	39	30	14	6	1	.....	337

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TABLE 33.—SANITARY DISTRICTS IN NEW JERSEY IN WHICH DEATHS FROM TYPHOID FEVER OCCURRED DURING THE YEAR ENDING DECEMBER 31, 1911, WITH POPULATION, NUMBER OF DEATHS, SOURCE OF WATER SUPPLY AND NATURE OF DRAINAGE.

NAME OF SANITARY DISTRICT.	Population, census 1910.	Number of deaths from typhoid fever.	Water supply.	Drainage.
Absecon	781	1	Domestic.	No sewers.
Acquackanonk Tp.	11,869	1	Domestic.	No sewers.
Asbury Park	10,150	2	Public.	Sewers.
Atlantic City	46,150	9	Public.	Sewers.
Atlantic Highlands Bor.	1,645	1	Public.	Sewers.
Bayonne	55,545	5	Public.	Sewers.
Bedminster Tp.	2,375	1	Domestic.	No sewers.
Bloomfield	15,070	1	Public.	Sewers.
Bridgeton	14,209	4	Public.	Sewers.
Buena Vista Tp.	2,723	1	Domestic.	No sewers.
Camden	94,538	10	Public.	Sewers.
Cedar Grove Tp.	2,409	1	Public.	Sewers.
Chester Tp. Bur. Co.	5,069	1	Domestic.	No sewers.
Clayton Borough	1,926	2	Public.	Sewers.
Commercial Township	2,604	1	Domestic.	No sewers.
Dover	7,468	1	Public.	Sewers.
Dover Tp. Ocean Co.	2,452	1	Domestic.	No sewers.
Dunellen Borough	1,990	2	Public.	No sewers.
East Orange	84,871	1	Public.	Sewers.
Edgewater Bor. Ber. Co.	2,655	1	Public.	Sewers.
Elizabeth	73,409	6	Public.	Sewers.
Elk Township	1,022	1	Domestic.	No sewers.
Englewood	9,924	2	Public.	Sewers.
Englishtown Borough	468	1	Domestic.	No sewers.
Florence Township	4,731	2	Domestic.	Sewers.
Franklin Tp., Glou. Co.	2,602	1	Domestic.	No sewers.
Franklin Tp. War. Co.	1,585	1	Domestic.	No sewers.
Freehold Borough	3,233	1	Public.	Sewers.
Glassboro Township	2,821	4	Public.	No sewers.
Glen Ridge Borough	3,260	1	Public.	Sewers.
Gloucester City	9,462	5	Public.	Sewers.
Gloucester Tp. Cam. Co.	2,380	1	Domestic.	No sewers.
Greenwich Tp. Glou. Co.	874	1	Domestic.	No sewers.
Guttenberg	5,647	2	Public.	Sewers.
Hackensack	14,050	2	Public.	Sewers.
Haddon Heights Bor.	1,452	1	Public.	Sewers.
Hammonton	5,088	2	Public.	No sewers.
Hardyston Township	5,210	1	Domestic.	No sewers.
Highland Park Bor.	1,517	1	Public.	Sewers.
Hightstown Borough	1,879	2	Public.	No sewers.
Hillsborough Tp.	2,313	1	Domestic.	No sewers.
Hoboken	70,324	13	Public.	Sewers.
Holly Beach Bor.	1,901	1	Public.	Sewers.
Hope Tp. War. Co.	1,119	1	Domestic.	No sewers.
Hopewell Tp. Mer. Co.	3,171	1	Domestic.	No sewers.
Irvington	11,877	1	Public.	Sewers.
Jersey City	267,779	22	Public.	Sewers.
Kearny	18,659	1	Public.	Sewers.
Keyport Borough	3,554	1	Public.	Sewers.
Lakewood Township	5,149	1	Public.	Sewers.
Lebanon Township	2,179	1	Domestic.	No sewers.
Little Falls Tp.	3,750	1	Public.	No sewers.
Long Branch	13,298	9	Public.	Sewers.
Lower Penns Neck Tp.	1,544	1	Domestic.	No sewers.
Manalapan Township	1,375	2	Domestic.	No sewers.
Manasquan Borough	1,532	1	Public.	No sewers.
Mansfield Township	1,526	1	Domestic.	No sewers.
Marlboro Township	1,754	2	Domestic.	No sewers.
Maurice River Tp.	2,124	1	Domestic.	No sewers.
Metuchen Borough	2,138	1	Public.	No sewers.
Middletown Township	6,653	2	Domestic.	No sewers.
Millville	13,451	2	Public.	Sewers.
Millstone Bor. Som. Co.	157	1	Domestic.	No sewers.
Montclair	21,550	4	Public.	Sewers.
Montgomery Tp. Som Co	1,637	1	Domestic.	No sewers.
Morristown	13,507	4	Public.	Sewers.
Mullica Township	811	1	Domestic.	No sewers.

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TABLE 33.—SANITARY DISTRICTS IN NEW JERSEY IN WHICH DEATHS FROM TYPHOID FEVER OCCURRED DURING THE YEAR ENDING DECEMBER 31, 1911, WITH POPULATION, NUMBER OF DEATHS, SOURCE OF WATER SUPPLY AND NATURE OF DRAINAGE—*Continued.*

NAME OF SANITARY DISTRICT.	Population, census 1910.	Number of deaths from typhoid fever.	Water supply.	Drainage.
Netcong Borough	1,532	1	Public.	No sewers.
Newark	347,469	40	Public.	Sewers.
New Brunswick	23,388	5	Public.	Sewers.
Northampton Tp.	5,652	2	Public.	Sewers.
Northfield City	866	1	Public.	No sewers.
North Plainfield	6,117	1	Public.	Sewers.
Orange	29,630	4	Public.	Sewers.
Oxford Tp. War. Co. ..	3,444	1	Domestic.	No sewers.
Passaic City	54,773	5	Public.	Sewers.
Paterson	125,600	9	Public.	Sewers.
Paulsboro Borough	2,121	1	Public.	No sewers.
Pemberton Township ..	1,679	2	Domestic.	No sewers.
Pennsgrove Borough ..	2,118	1	Public.	No sewers.
Perth Amboy	32,121	4	Public.	Sewers.
Pilesgrove Township ...	1,786	1	Domestic.	No sewers.
Plainfield	20,550	5	Public.	Sewers.
Pleasantville Borough ..	4,390	1	Public.	No sewers.
Pompton Township	4,044	1	Domestic.	No sewers.
Rahway	9,337	1	Public.	Sewers.
Ramsey Borough	1,667	1	Public.	No sewers.
Raritan Bor. Som. Co.	3,672	1	Public.	Sewers.
Raritan Tp. Mon. Co...	1,583	1	Domestic.	No sewers.
Ridgewood	5,416	1	Public.	Sewers.
Riverside Bor. Ber. Co.	736	1	Public.	Sewers.
Riverside Township ...	4,011	1	Public.	No sewers.
Rivervale Township ...	450	1	Domestic.	No sewers.
Salem City	6,614	1	Public.	Sewers.
Somerville	5,060	3	Public.	Sewers.
South Amboy	7,007	1	Public.	Sewers.
South Orange Tp.	2,979	1	Public.	Sewers.
Sparta Township	1,579	1	Domestic.	No sewers.
Spring Lake Bor.	853	4	Public.	Sewers.
Stafford Township	934	1	Domestic.	No sewers.
Swedesboro Borough ..	1,477	1	Public.	Sewers.
Town of Union	21,023	1	Public.	Sewers.
Trenton	96,815	47	Public.	Sewers.
Upper Freehold Tp. ...	2,053	1	Domestic.	No sewers.
Upper Penns Neck Tp. ..	744	1	Domestic.	No sewers.
Voorhees Township	1,174	1	Domestic.	No sewers.
Washington Tp. Glou. Co.	1,396	1	Domestic.	No sewers.
Washington Tp. Mor. Co.	1,900	1	Domestic.	No sewers.
Weehawken Township .	11,228	6	Public.	Sewers.
West Hoboken	35,403	3	Public.	Sewers.
West New York	13,560	1	Public.	Sewers.
West Orange	10,980	1	Public.	Sewers.
Westwood Borough	1,870	1	Public.	Sewers.
Woodbury	4,642	1	Public.	Sewers.
Woodstown Borough ..	1,613	2	Public.	Sewers.

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TABLE 34.—DEATHS FROM SCARLET FEVER, DIPHTHERIA AND TYPHOID FEVER IN NEW JERSEY FOR THE THIRTY-THREE YEARS ENDING DECEMBER 31, 1911, COMPARED WITH TOTAL DEATHS.

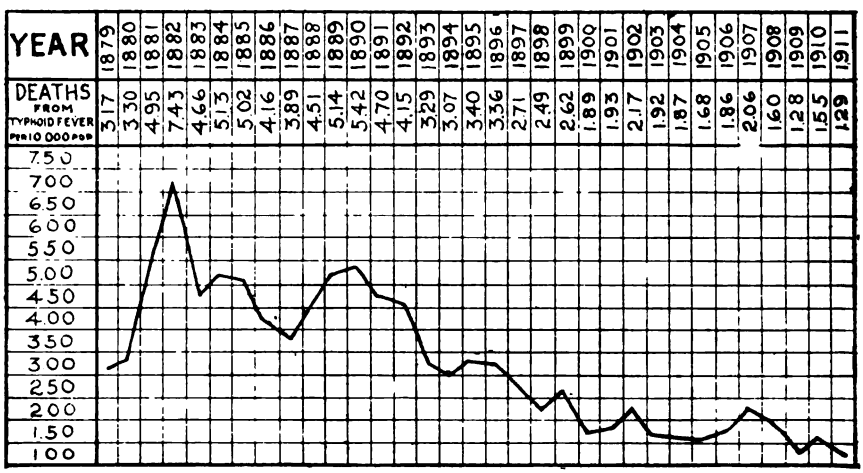
YEARS.	Population.	Total deaths.	Death-rate per 1,000 population.	SCARLET FEVER.		DIPHTHERIA.		TYPHOID FEVER	
				Number of deaths.	Death-rate per 1,000 population.	Number of deaths.	Death-rate per 1,000 population.	Number of deaths.	Death-rate per 1,000 population.
1879 ..	.....	20,440	18.07	627	.61	1,100	1.09	324	.32
1880 ..	1,130,892	18,967	16.77	573	.51	873	.77	373	.33
1881 ..	.....	20,310	18.39	499	.43	1,128	.97	574	.49
1882 ..	.....	25,910	22.90	1,206	1.01	1,472	1.24	884	.74
1883 ..	.....	23,310	20.60	853	.71	1,146	.95	564	.47
1884 ..	.....	21,716	19.20	547	.44	1,027	.82	640	.51
1885 ..	1,278,033	22,307	18.63	646	.51	1,496	1.17	642	.50
1886 ..	.....	22,734	17.80	222	.17	1,303	.99	545	.42
1887 ..	.....	24,331	19.04	255	.19	1,527	1.14	522	.39
1888 ..	.....	27,173	17.01	674	.42	2,036	1.48	620	.45
1889 ..	.....	26,542	18.99	533	.38	1,574	1.12	724	.51
1890 ..	1,441,017	28,530	19.80	209	.15	1,575	1.09	782	.54
1891 ..	.....	28,340	19.50	288	.19	1,737	1.17	695	.47
1892 ..	.....	32,685	21.62	1,008	.67	1,776	1.17	628	.42
1893 ..	.....	30,596	19.88	445	.29	1,677	1.09	506	.33
1894 ..	.....	30,004	19.09	272	.17	1,294	.82	485	.31
1895 ..	1,672,942	30,634	18.31	264	.16	1,464	.88	568	.34
1896 ..	.....	30,767	17.90	183	.11	1,758	1.02	577	.34
1897 ..	.....	29,822	16.90	203	.12	1,382	.78	478	.27
1898 ..	.....	27,237	15.11	201	.11	950	.52	450	.25
1899 ..	.....	30,999	16.70	187	.10	777	.42	486	.26
1900 ..	1,883,669	31,474	16.62	220	.12	927	.49	356	.19
1901 ..	.....	31,739	16.48	179	.09	683	.36	352	.19
1902 ..	.....	31,319	15.91	217	.11	683	.35	428	.22
1903 ..	.....	31,320	15.78	299	.15	748	.37	388	.19
1904 ..	.....	35,298	17.14	416	.20	918	.45	384	.19
1905 ..	2,144,143	33,864	15.79	164	.07	699	.33	360	.17
1906 ..	.....	35,670	16.24	193	.09	673	.31	408	.19
1907 ..	.....	37,408	16.63	286	.13	632	.29	464	.21
1908 ..	.....	35,597	15.47	396	.17	535	.23	367	.16
1909 ..	.....	36,359	15.46	338	.14	610	.26	301	.13
1910 ..	2,537,167	39,494	15.57	229	.09	728	.29	392	.16
1911 ..	2,615,773	38,612	14.76	214	.08	563	.22	337	.13

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TABLE 35.—SHOWING DEATHS FROM TYPHOID FEVER AND DEATHS PER 10,000 INHABITANTS FROM TYPHOID FEVER IN THE COUNTIES OF NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1911, ALSO CHART SHOWING DEATHS FROM TYPHOID FEVER PER 10,000 INHABITANTS IN THE COUNTIES OF NEW JERSEY FOR SAME PERIOD.

NAMES OF COUNTIES	Number of deaths from typhoid fever.	Deaths from typhoid fever per 10,000 inhabitants.	Chart showing deaths from typhoid fever per 10,000 inhabitants.
Atlantic County	16	2.15	
Bergen County	10	.69	
Burlington County ...	9	1.33	
Camden County	18	1.23	
Cape May County	1	.49	
Cumberland County ...	8	1.43	
Essex County	55	1.03	
Gloucester County	13	3.43	
Hudson County	54	.97	
Hunterdon County	1	.30	
Mercer County	50	3.89	
Middlesex County	14	1.19	
Monmouth County	28	2.91	
Morris County	7	.92	
Ocean County	3	1.40	
Passaic County	17	.76	
Salem County	7	2.58	
Somerset County	9	3.32	
Sussex County	2	.73	
Union County	12	.83	
Warren County	3	.69	

CHART SHOWING DEATHS FROM TYPHOID FEVER IN NEW JERSEY, PER 10,000 POPULATION FOR THIRTY THREE YEARS.



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WHOOPING COUGH.

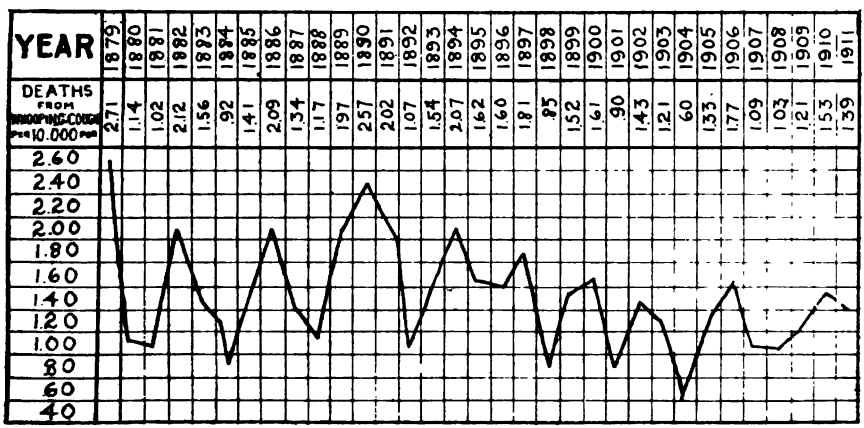
The number of deaths from whooping cough for the year ending Dec. 31, 1911, was 364, and the death-rate per 10,000 inhabitants, is 1.39.

There appears to be no adequate means at present for reducing the death-rate from this disease because of the difficulties encountered in isolation, therefore we will no doubt have periodical outbreaks of whooping cough from time to time.

TABLE 36.—SHOWING DEATHS IN NEW JERSEY FROM WHOOPING COUGH, WITH AGES OF DECEDENTS, FOR YEAR ENDING DECEMBER 31, 1911.

AGE PERIODS.	Deaths from whooping cough.	AGE PERIODS.	Deaths from whooping cough.	AGE PERIODS.	Deaths from whooping cough.
Under 1 month..	3	20 to 25.....	.....	50 to 55.....	.....
Under 1 year....	183	25 to 30.....	.....	55 to 60.....	.....
1 to 5.....	164	30 to 35.....	.....	60 to 70.....	.....
5 to 10.....	11	35 to 40.....	.....	70 to 80.....	2
10 to 15.....	1	40 to 45.....	.....	80 to 90.....	.....
15 to 20.....	.....	45 to 50.....	.....	Over 90.....	.....
				Total	364

CHART SHOWING DEATHS FROM WHOOPING COUGH IN NEW JERSEY, PER 10,000 POPULATION, FOR THE THIRTY-THREE YEARS ENDING DECEMBER 31, 1911.



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SCARLET FEVER.

For the year ending Dec. 31, 1911, 214 deaths from scarlet fever took place in New Jersey, and the death-rate per 10,000 inhabitants for the year was .82.

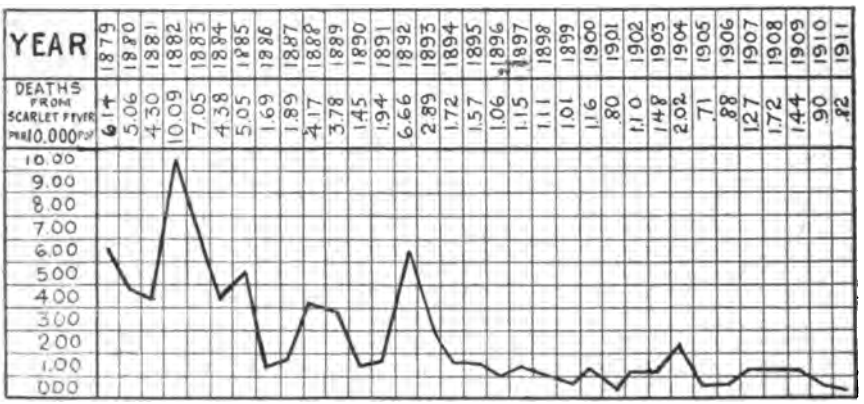
It will be noticed by the following chart, showing deaths from scarlet fever in New Jersey for thirty-three years, that the year of 1911 shows the lowest rate for the entire period, with two exceptions.

The advantages of a law requiring trained health officers and sanitary inspectors in this state it is hoped will be the means of further reducing the mortality from diseases such as scarlet fever, and others, where efficient health administration can be used with effect.

TABLE 37.—SHOWING DEATHS IN NEW JERSEY FROM SCARLET FEVER WITH AGE AT DEATH, FOR YEAR ENDING DECEMBER 31, 1911.

AGE PERIODS.	Deaths from scarlet fever.	AGE PERIODS.	Deaths from scarlet fever.	AGE PERIODS.	Deaths from scarlet fever.
Under 1 month..	.....	25 to 30.....	3	60 to 70.....	.....
Under 1 year ..	15	30 to 35.....	1	70 to 80.....	.....
1 to 5	110	35 to 40.....	1	80 to 90.....	.....
5 to 10.....	59	40 to 45.....	.....	Over 90.....	.....
10 to 15.....	11	45 to 50.....	1		
15 to 20	6	50 to 55.....	1		
20 to 25.....	6	55 to 60.....	.....	Total.....	214

CHART SHOWING DEATHS FROM SCARLET FEVER IN NEW JERSEY, PER 10,000 POPULATION, FOR THIRTY-THREE YEARS.



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MEASLES.

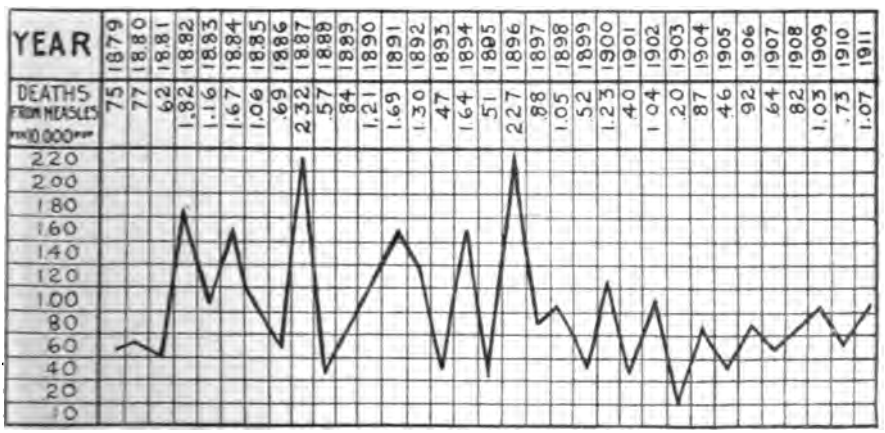
The number of deaths from measles for the calendar year 1911 was 281.

The accompanying chart shows the variations in the death-rate from measles in New Jersey for thirty-three years.

TABLE 38.—SHOWING DEATHS IN NEW JERSEY FROM MEASLES, WITH AGE AT DEATH, FOR YEAR ENDING DECEMBER 31, 1911.

AGE PERIODS.	Deaths from measles.	AGE PERIODS.	Deaths from measles.	AGE PERIODS.	Deaths from measles.
Under 1 month..	1	25 to 30.....	.....	60 to 70.....	.....
Under 1 year.. .	72	30 to 35.....	1	70 to 80.....	.....
1 to 5.....	177	35 to 40.....	.....	80 to 90.....	.....
5 to 10.....	17	40 to 45.....	.....	Over 90.....	.....
10 to 15.....	4	45 to 50.....	1		
15 to 20.....	3	50 to 55.....	2		
20 to 25.....	3	55 to 60.....	.....	Total.....	281

CHART SHOWING DEATHS IN NEW JERSEY FROM MEASLES, PER 10,000 POPULATION FOR THIRTY-THREE YEARS ENDING DECEMBER 31, 1911.



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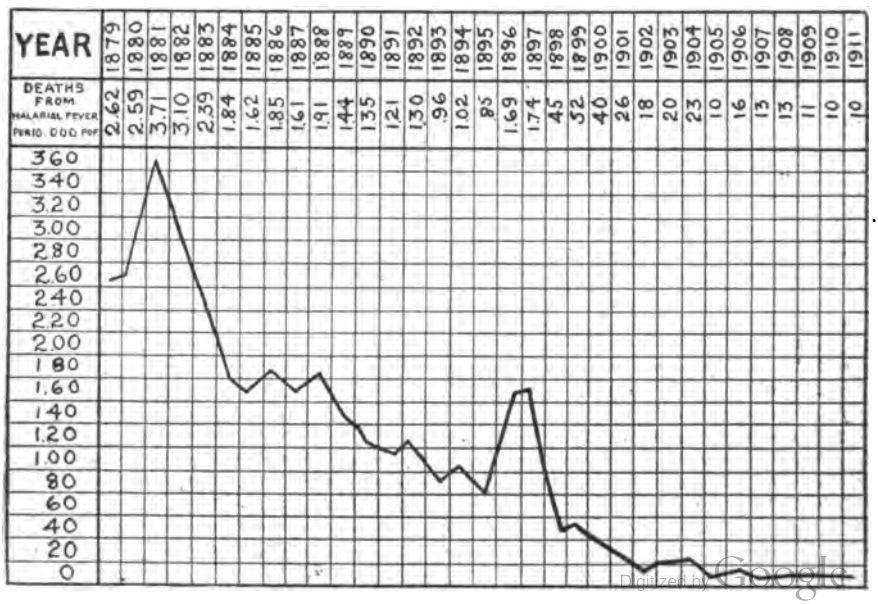
MALARIAL FEVER.

Deaths from malarial fever have not varied for the past three years, there being twenty-five deaths for the year 1909, and the same number for each succeeding year. It is gratifying to note, however, that there has been a gradual diminution of the deaths from malarial fever in this state for the thirty-three years of which this department has record.

TABLE 39.—SHOWING DEATHS IN NEW JERSEY FROM MALARIAL FEVER FOR THIRTY-THREE YEARS.

YEARS.	Deaths from malarial fever.	YEARS.	Deaths from malarial fever.	YEARS.	Deaths from malarial fever.
1879	268	1890	195	1901	50
1880	293	1891	180	1902	36
1881	431	1892	198	1903	40
1882	379	1893	148	1904	47
1883	290	1894	162	1905	21
1884	230	1895	144	1906	33
1885	209	1896	119	1907	29
1886	243	1897	132	1908	30
1887	217	1898	82	1909	25
1888	264	1899	96	1910	25
1889	203	1900	84	1911	25

CHART SHOWING DEATHS FROM MALARIAL AFFECTIONS, PER 10,000 INHABITANTS, IN NEW JERSEY, FOR THIRTY-THREE YEARS.



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SMALL POX.

During the year ending Dec. 31, 1911, the state has been free from epidemics of small pox, and only a few isolated cases have been reported from various parts of New Jersey during the year, from which one death has resulted.

The last epidemic of small pox in this State was in 1902, and there is no reason why a recurrence of such an epidemic should occur providing parents will see that their children are vaccinated, and when a case of smallpox is reported in a sanitary district the local board of health should at once recommend re-vaccination, especially of all persons who have come in contact with the person suffering from the disease.

TABLE 40.—SHOWING DEATHS IN NEW JERSEY FROM SMALL-POX FOR THIRTY-THREE YEARS.

YEARS.	Deaths from small-pox.	YEARS.	Deaths from small-pox.	YEARS.	Deaths from small-pox.
1879	...	1890	...	1901	142
1880	15	1891	...	1902	432
1881	254	1892	38	1903	16
1882	367	1893	43	1904	24
1883	54	1894	11	1905	1
1884	7	1895	23	1906	1
1885	2	1896	2	1907	1
1886	4	1897	...	1908	...
1887	5	1898	...	1909	2
1888	5	1899	...	1910	...
1889	3	1900	5	1911	1

CANCER.

The usual increase in cancer will be shown by the following tables, and it will be noticed that the death-rate from this disease has doubled during the past three decades.

In 1881 the death-rate per 10,000 inhabitants from cancer was 3.88, in 1891 4.34, and in 1911 7.42, and at the present time there seems to be no means offered to local boards of health for checking this disease.

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TABLE 41.—SHOWING DEATHS FROM CANCER IN NEW JERSEY FOR THIRTY-THREE YEARS.

YEARS.	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888
Deaths from cancer	378	425	451	402	461	484	493	546	574	612
Deaths from cancer per 10,000 population	3.70	3.75	3.88	3.37	3.81	3.87	3.89	4.15	4.21	4.45

YEARS.	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899
Deaths from cancer	579	640	642	688	723	781	770	811	857	852	946
Deaths from cancer per 10,000 population	4.11	4.41	4.34	4.55	4.69	4.63	4.60	4.71	4.93	4.70	5.10

YEARS.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Deaths from cancer	921	1,042	1,031	1,132	1,125	1,282	1,389	1,466	1,535	1,663	1,838	1,942
Deaths from cancer per 10,000 population	4.84	5.43	5.24	5.61	5.46	5.98	6.32	6.52	6.67	7.07	7.24	7.42

TABLE 42.—DEATHS FROM CANCER IN NEW JERSEY, BY AGE PERIODS, FOR ELEVEN YEARS.

YEARS.	AGE PERIODS. Under 1 year.	1 to 10.	10 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	Over 80.	Not stated.	Totals.
1901 ...	1	6	9	19	85	196	280	240	159	47	1	1,043
1902 ...	1	7	5	24	92	190	322	216	136	81	7	1,031
1903 ...	.....	10	2	22	79	179	293	308	177	57	5	1,132
1904 ...	7	5	9	21	81	168	286	302	199	47	.....	1,125
1905 ...	6	15	11	22	87	239	294	353	190	64	1	1,282
1906 ...	2	12	6	25	104	241	350	350	225	74	.....	1,389
1907 ...	1	8	14	23	91	244	377	369	262	77	.....	1,466
1908 ...	1	13	9	27	118	260	377	414	236	80	.....	1,535
1909 ...	2	9	4	26	104	260	437	435	282	104	.....	1,663
1910 ...	2	14	10	32	106	299	462	499	316	98	.....	1,838
1911 ...	3	8	9	31	109	310	495	535	333	109	.....	1,942

TABLE 43.—DEATHS FROM CANCER IN NEW JERSEY, SHOWING ORGANS AFFECTED AND AGE AT DEATH, FOR THE YEAR ENDING DECEMBER 31, 1911.

CANCER.	Under 1 month.	Under 1 year.	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 70.	70 to 80.	80 to 90.	Over 90.	Age not stated.	Totals.
Of the mouth .../..	..	1	1	1	1	2	..	..	2	2	4	12	13	27	20	4	1	..	91
Of the stomach and liver	1	2	..	1	..	3	8	13	25	44	69	111	131	257	155	46	....	..	866
Of the intestines and rectum	..	..	..	..	..	..	1	2	3	9	14	21	29	22	81	63	16	1	..	262
Of the female genital organs ...	1	1	..	..	..	..	2	2	8	22	35	51	50	32	66	26	10	....	..	306
Of the breast...	..	..	..	..	..	..	2	2	1	11	18	26	23	21	43	27	12	....	..	186
Of the skin.....	..	..	..	..	..	2	1	..	..	1	...	5	10	7	14	11	7	3	..	61
Others	..	1	2	1	3	1	4	2	3	11	9	12	19	15	47	31	8	1	..	170
Totals	..	3	6	2	5	4	15	16	28	81	122	188	254	241	536	333	103	6	..	1,942

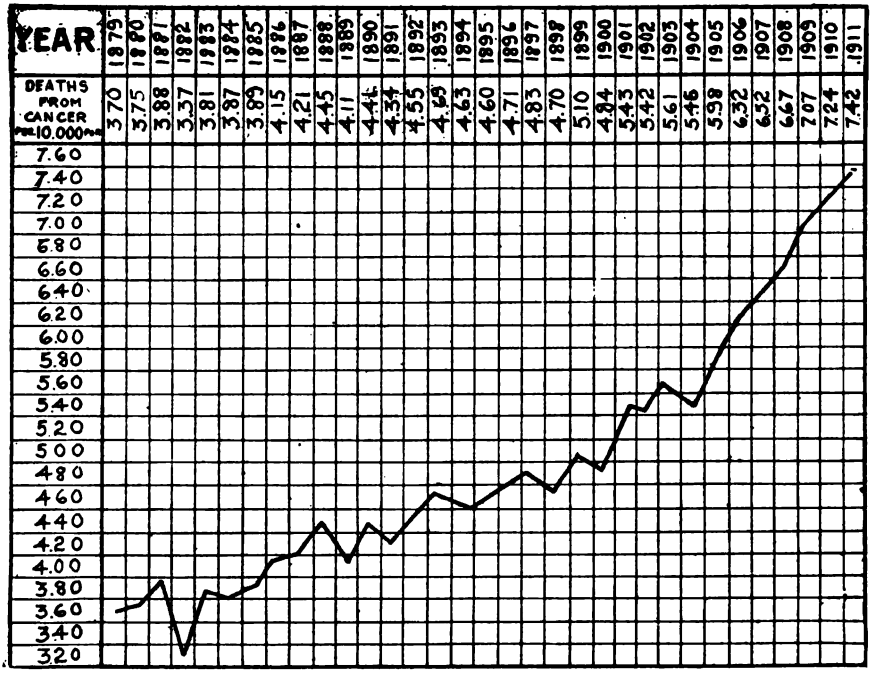
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TABLE 44.—DEATHS FROM CANCER IN NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1911, PER 10,000 POPULATION, BY COUNTIES AND BY CITIES OF OVER 5,000 INHABITANTS.

NAME OF PLACE.	Deaths from cancer.	Deaths per 10,000 population.
Atlantic County	16	7.55
Atlantic City	42	8.78
Hammonton	1	1.91
Bergen County	55	5.71
Englewood	6	5.81
Garfield	4	3.56
Hackensack	12	8.20
Ridgewood	5	3.77
Rutherford	4	5.40
Burlington County	57	10.40
Bordentown	3	13.67
Burlington City	4	4.76
Camden County	24	6.06
Camden City	76	7.85
Gloucester City	4	4.11
Cape May County	11	5.44
Cumberland County	34	14.50
Bridgeton	13	9.07
Millville	11	8.76
Vineland	11	20.30
Essex County	18	5.74
Bloomfield	6	3.81
East Orange	29	8.01
Irvington	12	9.36
Montclair	16	7.08
Newark	275	7.63
Nutley	4	6.35
Orange	29	9.56
South Orange	7	11.24
West Orange	4	3.45
Gloucester County	28	7.88
Hudson County	33	8.99
Bayonne	24	4.12
Guttenberg	4	6.82
Harrison	8	5.39
Hoboken	58	8.14
Jersey City	181	6.58
Kearny	19	9.66
Town of Union	16	7.33
West Hoboken	18	4.91
West New York	10	6.74
Hunterdon County	27	9.30
Lambertville	2	4.36
Mercer County	11	4.51
Princeton	4	8.07
Trenton	73	7.35
Middlesex County	24	4.98
New Brunswick	19	8.11
Perth Amboy	18	5.39
Roosevelt	2	3.46
South Amboy	5	6.99
Monmouth County	63	9.89
Asbury Park	7	6.21
Long Branch	22	16.27
Red Bank	5	6.56
Morris County	46	8.25
Dover	5	6.50
Morristown	18	14.31
Ocean County	20	9.34
Passaic County	17	4.55
Passaic City	25	4.30
Paterson	112	8.72
Salem County	17	8.30
Salem City	6	9.03
Somerset County	25	8.93
North Plainfield	2	3.22
Somerville	5	9.77
Sussex County	23	8.37
Union County	18	7.47
Elizabeth	57	7.50
Plainfield	29	13.33
Rahway	11	11.61
Summit	3	3.93
Westfield	2	3.01
Warren County	15	5.05
Phillipsburg	7	5.00
Total in cities of over 5,000 inhabitants	1,360	
Total for State	1,942	
Rate per 10,000 population (State)		7.42

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CHART SHOWING DEATHS IN NEW JERSEY FROM CANCER, PER 10,000 POPULATION, FOR THIRTY-THREE YEARS, 1879-1911.



SUICIDE.

Deaths from suicide for the year ending Dec. 31, 1911, show a slight decrease from the previous year, and is the lowest number of deaths for any period during the past four years.

The following tables will show the means of suicide for the past year, also the counties and cities of New Jersey showing the total number of suicides in each district, with the nationality of the deceased.

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TABLE 45.—SHOWING DEATHS IN NEW JERSEY FROM SUICIDE FOR ELEVEN YEARS, 1901-1911.

YEARS.	Deaths from suicide.	YEARS.	Deaths from suicide.
1901	265	1906	338
1902	271	1907	387
1903	314	1908	448
1904	330	1909	432
1905	354	1910	444
		1911	414

TABLE 46.—DEATHS IN NEW JERSEY FROM SUICIDE, SHOWING MODE OF DEATH AND AGE AT DEATH, FOR THE YEAR ENDING DECEMBER 31, 1911.

MODE OF DEATH.	AGE AT DEATH.																	Totals.
	1 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 70.	70 to 80.	80 to 90.	Over 90.	Not stated.	
By poison	..	..	2	9	11	13	14	10	14	4	9	6	10	4	1	.....	..	107
By asphyxia	..	..	..	2	2	2	7	8	3	13	10	11	13	2	..	.....	..	73
By strangulation	..	..	1	3	2	3	5	7	12	8	9	8	11	3	1	.....	..	73
By drowning	..	..	..	1	4	..	2	5	2	..	3	1	2	2	..	.....	..	22
By firearms	..	..	2	4	16	9	13	13	10	9	14	12	8	3	..	.....	..	113
By cutting instruments	..	..	..	..	..	1	4	3	3	..	2	3	3	..	..	.....	..	19
By precipitation from height	..	..	..	..	..	..	..	1	2	..	..	1	..	..	..	.....	..	4
By crushing	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	.....	..	1
Others	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	.....	..	2
Totals	..	..	5	19	36	28	46	47	47	34	47	42	47	14	2	.....	..	414

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TABLE 47.—SHOWING NUMBER OF DEATHS BY SUICIDE RECORDED IN NEW JERSEY, BY CITIES, AND BY COUNTIES, EXCLUSIVE OF CITIES, FOR THE YEAR ENDING DECEMBER 31, 1911.

NAME OF PLACE.	COUNTRY OF BIRTH.												
	United States.	England.	France.	Germany.	Ireland.	Italy.	Scotland.	Hungary.	Sweden.	Russia	Holland.	Other foreign.	Not stated.	Total.
Atlantic County														4
Atlantic City	12			1				1				3		17
Hammonton														
Bergen County														20
Englewood	1			1		1								3
Garfield												1		1
Hackensack	3													3
Ridgewood														
Rutherford				1				1						2
Burlington County														7
Bordentown	1													1
Burlington	2													2
Camden County														4
Camden City	13			4									1	18
Gloucester City	1													1
Cape May County														1
Cumberland County														4
Bridgeton	2													2
Millville	1													1
Vineland														
Essex County														3
Bloomfield					1									1
East Orange	4			1										5
Irvington	1	1		1			1							4
Montclair	3			1										4
Newark	35	4	1	11	3	1	2	3		7		3	4	74
Nutley	2			1										3
Orange	3					1								4
South Orange														
West Orange	1											1	1	3
Gloucester County														2
Hudson County														7
Bayonne	1			3			1	1		3		1	1	11
Guttenberg														
Harrison					1					1				2
Hoboken	4			12	2	1				1				20
Jersey City	21	1		4	1	1		1	1	3			3	36
Kearny	1								1					2
Town of Union	2			2										4
West Hoboken			1	2		1								4
West New York				2								1		3
Hunterdon County														2
Lambertville														
Mercer County														3
Princeton	2													2
Trenton	4	2		1	2			1				1		11
Middlesex County														9
New Brunswick	1							2		1				4
Perth Amboy	1													1
Roosevelt								1					1	2
South Amboy	1													1
Monmouth County														5
Asbury Park	1													1
Long Branch	1													1
Red Bank	1				1				1			1		4
Morris County														6
Dover						1								1
Morristown						1								1
Ocean County														2
Passaic County														6
Passaic City	3							3			1		1	8
Paterson	9			4		1	1			1		4	2	22
Salem County														
Salem City	1													1
Somerset County														1
North Plainfield	2													2
Somerville	1							1						2
Sussex County														1
Union County														4
Elizabeth	10	1		2	1			2		1				17
Plainfield	2													2
Rahway	1													1
Summit														
Westfield														
Warren County														5
Phillipsburg	3													3
Totals	158	9	2	54	12	9	5	17	3	18	1	16	14	414

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BRIGHT'S DISEASE.

For a number of years this department has kept a separate classification showing the number of deaths from Bright's disease in various municipalities of New Jersey, and the following table shows the figures for the past year, together with the ten years preceding. It will be noticed that during the period covered by the said table the deaths from this disease have more than doubled.

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TABLE 48.—SHOWING NUMBER OF DEATHS FROM BRIGHT'S DISEASE IN NEW JERSEY, IN COUNTIES, EXCLUSIVE OF CITIES, AND IN CITIES OF OVER 5,000 INHABITANTS, FOR ELEVEN YEARS.

NAMES OF COUNTIES AND CITIES.	DEATHS FROM BRIGHT'S DISEASE.										
	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Atlantic County	13	14	15	21	25	21	26	25	25	27	24
Atlantic City	36	32	34	38	60	66	66	81	78	80	60
Hammonton	....	....	....	....	....	....	....	....	....	....	2
Bergen County	25	22	31	47	37	61	49	50	62	60	60
Englewood	2	5	7	5	7	5	7	11	12	10	6
Garfield	....	....	....	....	....	....	2	4	1	4	6
Hackensack	8	3	8	8	16	12	9	8	17	12	19
Ridgewood	....	....	....	....	....	....	....	....	....	....	3
Rutherford	....	....	....	....	....	....	....	....	2	2	3
Burlington County	40	28	39	47	46	46	44	75	47	67	58
Bordentown	....	....	....	5	3	11	4	2	4	5	11
Burlington	9	10	12	10	12	10	14	10	13	19	17
Camden County	12	17	29	20	27	25	31	38	32	51	43
Camden	64	87	84	106	113	113	131	114	133	132	142
Gloucester City	2	5	11	6	6	7	7	15	12	17	10
Cape May County	2	7	10	12	11	22	18	15	24	21	38
Cumberland County	15	16	22	27	19	22	21	24	26	26	31
Bridgeton	11	22	24	24	13	15	19	12	21	30	20
Millville	7	5	3	8	12	8	9	15	8	8	17
Vineland	....	....	....	....	....	....	....	....	....	....	8
Essex County	17	15	19	23	21	26	26	28	31	47	36
Bloomfield	5	6	1	5	7	9	11	10	12	8	13
East Orange	11	20	20	20	15	12	25	24	15	30	30
Irvington	1	4	5	6	2	11	7	6	9	11	10
Montclair	11	5	9	13	11	19	14	12	22	21	18
Newark	249	255	308	287	279	359	403	328	398	377	404
Nutley	....	....	....	....	....	....	....	....	....	....	2
Orange	19	20	33	20	18	34	36	30	33	28	33
South Orange	....	....	....	....	....	....	....	....	....	....	8
West Orange	7	2	7	5	7	7	7	4	6	5	6
Gloucester County	17	12	32	23	28	38	32	33	36	31	45
Hudson County	39	13	22	29	36	27	49	36	35	36	65
Bayonne	16	21	25	23	29	31	38	39	28	62	57
Guttenberg	....	....	....	....	....	....	....	....	....	....	11
Harrison	3	2	7	9	9	12	12	12	9	8	10
Hoboken	41	57	78	80	75	112	111	67	87	88	99
Jersey City	140	158	179	194	236	279	293	266	299	285	338
Kearny	....	7	7	10	6	10	8	15	12	15	15
Town of Union	14	12	19	15	14	16	24	20	25	11	20
West Hoboken	....	21	14	12	29	23	27	40	29	35	38
West New York	....	4	9	5	8	5	5	8	12	6	7
Hunterdon County	17	12	22	26	28	43	42	31	34	40	41
Lambertville	....	....	....	....	....	....	3	1	8	7	1
Mercer County	6	13	9	9	8	24	18	15	13	33	17
Princeton	....	....	....	....	....	....	3	4	6	4	6
Trenton	3	54	60	71	74	87	103	88	96	119	126
Middlesex County	22	18	20	18	25	25	41	32	35	35	32
New Brunswick	18	19	26	19	28	13	23	19	29	22	29
Perth Amboy	9	11	9	5	17	23	22	20	13	26	23
Roosevelt	....	....	....	....	....	....	....	....	....	....	2
South Amboy	2	5	3	4	1	7	4	8	5	11	3
Monmouth County	42	50	55	57	48	62	56	59	60	80	75
Asbury Park	....	....	....	....	....	....	11	17	13	21	14
Long Branch	13	10	13	8	13	23	23	19	26	29	18
Red Bank	4	2	4	3	4	4	8	7	9	11	8
Morris County	30	26	44	35	36	38	47	42	36	33	55
Dover	4	4	6	7	9	4	13	6	10	10	8
Morristown	8	12	8	13	10	10	13	14	10	9	13
Ocean County	11	12	14	13	16	16	23	12	33	24	29
Passaic County	7	6	11	9	17	14	24	20	13	23	20
Passaic City	11	15	12	21	20	31	35	45	41	33	30
Paterson	44	60	75	70	84	125	168	153	135	135	154
Salem County	14	11	16	14	9	13	16	15	17	20	12
Salem City	....	4	5	7	9	5	7	7	3	7	8
Somerset County	17	22	17	17	19	26	21	17	25	32	24
North Plainfield	3	....	4	2	4	3	12	2	8	14	11
Somerville	....	....	....	....	....	....	....	....	....	....	6
Sussex County	6	8	13	9	12	14	16	20	13	15	13
Union County	10	9	15	11	17	17	16	17	16	20	13
Elizabeth	48	28	45	50	51	73	67	59	65	50	57
Plainfield	14	15	9	15	13	22	29	20	21	28	22
Rahway	9	14	13	9	6	7	12	9	12	11	11
Summit	1	4	7	5	....	2	3	5	4	10	3
Westfield	....	....	....	....	....	....	4	4	4	5	4
Warren County	14	16	17	24	21	19	37	17	29	28	39
Phillipsburg	5	4	4	8	5	14	13	9	14	9	11
Total	1,246	1,371	1,686	1,722	1,840	2,238	2,518	2,290	2,486	2,679	2,772

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Report of the Division of Medical and Sanitary Inspection.

A. CLARK HUNT, M. D., CHIEF.

To the Board of Health of the State of New Jersey:

GENTLEMEN—I have the honor to submit the following report on the Division of Medical and Sanitary Inspection for the year ending October 31, 1912.

This division under general and special laws is charged with the investigation of epidemics occurring in the State and has control of contagious diseases on dairy premises. It also directs the methods which shall be adopted to prevent the spread of communicable diseases in the State institutions and has, in an advisory relation, supervision over the 474 local boards of health of the State.

In 1910 a special law relating to educational work for the prevention of tuberculosis was passed, and $10,000 was appropriated for that purpose. The conduct of the campaign was delegated to this division.

The record of work of the division for the year ending October 31 has been satisfactory. The foundation of effective work is based primarily upon a knowledge of conditions. Prior to 1911, the laws requiring the reporting of contagious diseases to the State Board of Health were ineffective and the statistics gathered were unreliable. The law of 1911, chapter 381, has made it possible to secure quite complete and accurate statistics of morbidity, and we are now able to make comparisons between morbidity and mortality of certain communible diseases from which valuable deductions can be made.

The tables on reportable diseases, which appear at the close of this report, are, we believe, as complete as are obtained in any State. While statistics of this character are available in cities, the gathering of statistics for a complete State is extremely difficult.

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The tables indicate that it is possible when suitable laws are properly enforced.

The tuberculosis campaign is outlined in the exhaustive report which is presented later on in the divisional report. In the short time during which the exhibit was on the road twenty-two places were visited, 106 lectures given and over 5,000 lantern slides shown. The attendance at the meetings held was over 105,000. The itinerary for the coming year is already completed and the educational work which we plan should in time to come have a definite effect on the prevention of tuberculosis.

Dr. Millard Knowlton, who is in charge of the exhibit, has rendered valuable service and to his efforts is due in large part its apparent success and usefulness.

In epidemiological research the year has been marked by investigations into epidemics which were of special interest and in which the origins of the infections were definitely determined and the spread of disease limited.

Attention is directed to the reports which follow on typhoid fever at Moorestown, Woodbury and Skillman. These investigations were made by Mr. D. C. Bowen, of this division, whose careful collection of all data relating to the cases and close analytical deductions from such data has furnished us with complete and valuable reports.

Local boards of health frequently ask for assistance in determining the methods to be adopted in dealing with nuisances. A table showing the number of such requests is presented and also a table of certain contagious disease occurring on dairy premises, which were investigated by representatives of the division, indicating the action which was taken to prevent the spread of diseases by infected milk.

We trust that the various subjects discussed in the report will be of interest to persons whose thoughts and energies are concentrated on the great cause of disease prevention.

REPORTS OF COMMUNICABLE DISEASES.

There has been an increase of 2,617 in the total number of cases of communicable diseases reported during the year ending October 31, 1912. This increase has been entirely due to a better

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observation of the law and not to the greater prevalence of these diseases. This is borne out by the figures which show a decrease of 131 deaths from reportable communicable diseases during the same period of time.

The most notable improvement has taken place in the reports of tuberculosis. The 5,595 cases reported is an increase of 3,000 (43%) over the preceding year. The total number of deaths from tuberculosis during the corresponding period of time shows an increase of 75 cases, considerably less than are accounted for by the increased population.

Typhoid fever shows an increase of 407 cases reported and a decrease of 31 in the total number of deaths recorded. The 483 cases of malaria reported is an increase of 438 over the number reported during the statistical year of 1911. This increase was solely due to the fact that malaria was only placed on the list of reportable diseases in 1911. An increase of 1,125 cases of chicken-pox reported is also the result of adding chicken-pox to the list of communicable diseases made reportable by chapter 381, laws of 1911.

While the combined reports from the four diseases above named, i. e., typhoid fever, tuberculosis, malaria and chicken-pox, show an increase of 4,970 cases over the preceding year, these figures are partially offset by a total decrease of 2,438 reported cases from diphtheria, scarlet fever and small-pox. The deaths from diphtheria and scarlet fever have, however, decreased by 159 cases in the former and 85 in the latter named disease, apparently showing that this falling off in the number of reported cases has not necessarily been due to a less strict observance of the law, but rather to an actual decrease in the prevalence of the disease.

Prior to the statistical year just closed there was no compilation of records, for the State as a whole, showing comparative figures for reported cases and deaths from reportable communicable diseases. By the system now established by the Division of Medical and Sanitary Inspection, accurate data on this subject is available for the year 1912, and for purposes of comparison the reported cases and deaths for the three preceding years have been brought together. In order to do this it was necessary to take the deaths for the year preceding 1912 from the records of the Bureau of Vital Statistics, in which the statistical year closes December

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31, instead of October 31, as in other departments of the board. A slight variance, therefore, occurs in the time of the year represented by the records of reported cases and that of deaths for the years 1909, 1910 and 1911; in that the figures representing the number of cases are for years ending October 31, whereas those showing deaths are for years ending December 31. Thus the death records overlap the case records for the years named by a period of two months. This slight decrepancy in the time, however, makes no practical difference in the deductions to be made from the figures shown in the tables that follow.

TYPHOID FEVER: The reported cases of this disease number 2.024 and 306 deaths were reported. This gives a mortality of 15%, which is approximately 50% too high and means that typhoid fever is poorly reported, at least in some parts of this State. This statement is borne out by the fact that 46 deaths have occurred during the year from unreported cases of typhoid fever which equal 15% of the total deaths caused by this disease. These deaths from unreported cases have occurred in fifteen counties. Hudson leads the list with a total of 17, equal to 43% of the total number of deaths from typhoid fever in that county. Following with deaths from unreported cases in Bergen County 5; Monmouth County; Mercer County 4; Middlesex County 3; Passaic and Essex Counties 2 each; Gloucester, Atlantic, Union, Salem, Cumberland, Somerset, Camden and Sussex Counties 1 each.

The deaths from typhoid fever during the year (306) are somewhat less than heretofore recorded in this State, save for the year 1909 when there were 5 less deaths. The death rate, based on an estimated population for the years 1911 and 1912, is therefore less than has occurred in any preceding year. The saving is not, however as much as would naturally follow were health officials and municipal authorities in the control of public water supplies to fully utilize the present known methods of preventing this disease.

Reported cases, deaths and the death rate per 10,000 population, together with an estimate of the probable number of cases that occurred during the year based on a morbidity rate of 8%, are shown for a period of four years in the following table:

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TABLE I.

Year.	Population.	Reported Cases.	Deaths.	Death Rate per 10,000 population.	Est. No. of cases based on morbidity rate of 8%
1909	2,352,522	1,268	301	1.27	3,762
1910	2,537,167	1,134	392	1.55	4,900
1911	2,611,799	1,617	337	1.29	4,112
1912	2,686,389	2,024	306	1.14	3,835

DIPHTHERIA: There were 1055 cases of diphtheria reported and 110 fewer deaths during the year 1912 than for the preceding year. Out of 458 deaths from this disease 22 (4.8%) were from unreported cases. In investigating unreported fatal cases it is found that failure to report quite frequently occurs in cases followed by sudden death and in which no physician was called until a short time before death. Under such circumstances physicians sometimes erroneously assume that a certificate of death also answers the requirements of a report of the case to the local health officials.

The diminution of 19.3% in the number of reported cases of diphtheria during the past year has been accompanied by a decrease in the death rate of .14 per 10,000 population, thus giving the lowest death rate from diphtheria recorded in this State.

The reported cases, recorded deaths and death rate per 10,000 population from diphtheria, for the past four years, is shown in Table II.

TABLE II.

Year.	Population.	Reported Cases.	Deaths.	Death rate per 10,000
1909	2,352,522	3,703	610	2.59
1910	2,537,167	5,072	728	2.87
1911	2,611,799	5,884	568	2.19
1912	2,686,389	4,829	458	1.70

ANTERIOR POLIOMYELITIS: Deaths from infantile paralysis are not separately classified in the State Bureau of Vital Statistics, consequently there are no available death records for the years preceding 1912. Since October 31, 1911, deaths from anterior poliomyelitis have been recorded in the Division of Medical and Sanitary Inspection in conjunction with reported cases. No comparative tables showing deaths and reported cases can, therefore, be given except for the year 1912. Twelve of the 21 deaths from an-

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terior poliomyelitis during the year were from unreported cases, so that with a record of 57% of the deaths for the year occurring from unreported cases, the figures in the following table can give no suggestion of the prevalence of the diesase throughout the State. The very poor showing in reports of this disease is evidently due to lack of knowledge of the law on the part of physicians, rather than to a disposition to disregard it.

TABLE III.

Showing reported cases of Anterior Poliomyelitis for the years 1911 and 1912, and recorded deaths for 1912.

Years.	*Reported Cases.*	*Deaths.*
1911	47	..
1912	50	21

SCARLET FEVER: Reports of 3,987 cases of sacrlet fever during the year is 1,384 less than for the year preceding. There were 129 deaths, a rate of .44 per 10,000 population; 55% less for the year 1911, and the lowest death rate recorded in this State. There were 5 deaths from unreported cases.

TABLE IV.

Showing reported cases of Scarlet Fever, deaths and death rate for four preceding years.

Year.	*Population.*	*Reported Cases.*	*Deaths.*	*Death Rate per 10,000 population*
1909	2,352,522	4,821	338	1.44
1910	2,537,167	6,955	229	.90
1911	2,611,799	5,335	214	.82
1912	2,686,389	3,987	129	.44

TUBERCULOSIS: Responding to recent legislative enactments and to the increased activities on the part of the State and local boards of health, there has been an increase of 3,000 in the number of cases of tuberculosis reported during the year, an increase of 53.7% over the preceding year. Of the 3,982 deaths from this disease 539 of them occurred from cases that had not previously been reported.

Notwithstanding this improvement in reporting cases over previous years, with 16% of the total deaths for the year occurring from unreported cases, it is plain that the recorded cases of tuberculosis cannot be taken as a reliable basis upon which to calculate

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the number of active cases in the State. However, with a corresponding improvement in the reports during the next few years, somewhat dependable information will be at hand.

A better understanding on the part of the public of the communicable nature of this disease, and the work that is being done in the care and treatment of infected persons is surely reflected in the markedly lowered death rate during the years 1911 and 1912; for the death rate dropped from 15.28 per 10,000 population in 1910 to 11.13% in 1911, and still further declined to 11.10% in 1912.

TABLE V.

Showing morbidity and mortality from tuberculosis for the past four years.

Year.	*Population.*	*Reported Cases.*	*Deaths.*	*Death Rate per 10,000 population*
1909	2,352,522	825	3,608	15.34
1910	2,537,167	1,221	3,877	15.28
1911	2,611,799	2,595	3,907	11.13
1912	2,686,389	5,595	3,982	11.10

MALARIA: Malaria was made reportable by an act of the Legislature approved July 6, 1911. Nothing approximating complete reports of cases could, therefore, be expected during the past year. Nevertheless, 483 cases were reported. There were 22 deaths from malaria in 1912 and 25 during each of the three preceding years. The death rate, therefore, appears to have remained about constant, during the past four years.

A study of the Table VII. showing the morbidity and mortality records of reportable diseases by counties presents some peculiar features pertaining to the reported cases and recorded deaths from malaria. According to the reported cases: Sussex County, with 366 cases, leads the State in reports on this disease. Following is Essex, with 35 reported cases; Cumberland with 23, Union 15 and Mercer 13. Of reported cases, 93.5% have come from the five counties above mentioned, while only 45.5% of the deaths from malaria in the State were chargeable to these counties. The deduction drawn from these figures shows conclusively that cases of malaria are not well reported in all parts of the State; consequently the records of reported cases are too unreliable to be used as a basis to figure the morbidity rate, or to give any conception of the prevalence of the disease.

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TABLE VII. MORBIDITY AND

BY COUNTIES, FOR THE YEAR

COUNTIES.	Estimated Population	Typhoid Fever.		Diphtheria.		Scarlet Fever.		Tuberculosis.		Chickenpox.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Atlantic County,	76,610	85	18	129	22	54	2	64	95	110	...
Bergen County,	146,308	77	15	207	20	172	6	161	139	262	...
Burlington County,	68,981	216	23	133	16	137	8	75	86	125	...
Camden County,	149,573	116	15	330	43	173	1	379	251	206	...
Cape May County,	20,805	4	.....	5	.....	14	.....	2	11	26	...
Cumberland County,	56,330	43	4	64	8	64	1	69	75	53	...
Essex County,	552,461	306	39	1,405	113	1,017	23	2,048	950	312	2
Gloucester County.	38,427	56	10	27	3	44	.....	39	37	31	..
Hudson County,	571,809	151	39	1,072	92	834	34	1,141	1,035	325	..
Hunterdon County,	36,785	28	7	34	3	53	.....	21	29	17	..
Mercer County.	129,810	244	40	148	17	199	3	426	241	1	...
Middlesex County.	119,470	95	17	240	23	120	2	145	141	49	..
Monmouth County.	96,859	202	28	126	10	159	9	84	135	21	...
Morris County,	70,730	45	7	76	11	115	.....	79	94	69	..
Ocean County,	22,205	16	1	53	6	12	.....	23	23	4	..
Passaic County,	231,807	135	13	380	36	302	19	382	287	96	...
Salem County,	27,287	14	3	6	.....	9	1	28	37	11	..
Somerset County,	48,569	37	3	85	6	34	2	47	41	16	..
Sussex County.	28,186	10	1	13	.....	60	4	30	24	28	...
Union County.	149,084	118	22	274	26	361	13	310	204	252	...
Warren County.	44,296	26	1	22	3	54	1	42	47	.....	...
	2,686,389	2,024	306	4,829	458	3,987	129	5,595	3,982	2,014	2

TABLE VIII. REPORTED CASES AND DEATHS FROM

FOR FOUR YEARS ENDING

Years.	Population.	Typhoid Fever.		Diphtheria.		Scarlet Fever.		Tuberculosis.		Malaria.	
		c	d	c	d	c	d	c	d	c	d
1909	2,352,522	1,268	301	3,703	610	4,821	338	825	3,608	.....	25
1910	2,537,167	1,134	392	5,072	728	6,955	229	1,221	3,877	.....	25
1911	2,611,799	1,617	337	5,884	568	5,335	214	2,595	3,907	44	25
1912	2,686,389	2,024	306	4,829	458	3,987	129	5,595	3,982	483	22

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MORTALITY TABLE,

ENDING OCTOBER 31, 1912.

Small-pox.		Malaria.		Anterior Poliomye-letis.		Trachoma		Ophthal-mia.		Hydropho-bia.		Anthrax.		Trichi-nosis.	
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	2	1	4	4	....	....	....	....	....	....	....	....	....	....
....	....	6	....	3	....	....	....	....	....	1	1	....	....	....	....
1	....	23	3	4	....	5	....	....	....	....	....	2	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	6	....	1	....	....	....	....	....	....	....	....	....	....	....
6	....	35	3	24	5	38	....	6	....	1	1	1	1	2	....
....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....
3	....	6	3	3	2	4	....	....	....	3	1	....	....	....	....
....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....
....	....	13	....	1	1	....	....	....	....	....	....	....	....	....	....
1	....	2	....	1	1	....	....	....	....	....	....	....	....	....	....
....	....	1	1	2	1	....	....	....	....	....	....	....	....	....	....
....	....	5	....	....	1	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	3	....	8	2	1	....	1	....	1	1	....	....	....	....
....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....
....	....	....	3	1	1	....	....	....	....	....	....	1	....	....	....
....	....	366	2	....	....	7	....	....	....	....	....	....	....	....	....
....	....	15	2	6	....	....	....	....	....	....	....	....	....	....	....
1	1	....	1	....	2	....	....	....	....	....	....	....	....	1	....
12	1	483	22	59	21	55	.....	7	.....	6	4	4	1	3	....

CERTAIN COMMUNICABLE DISEASES

OCTOBER 31, 1912.

Ant. Polioml.		Hydropho bia.		Chicken-pox.		Small-pox.		Anthrax.		Trachoma		Opthal-mia.		Trichi-nosis.	
c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d
.....	.....	.....	3	601	.....	88	2	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	8	671	.....	20	.....	.....	.....	.....	.....	.....	.....	.....	.....
47	.....	1	13	889	.....	47	1	.....	.....	.....	.....	1	.....	.....	.....
59	21	6	4	2,014	2	12	1	4	1	55	.....	7	.....	3	.....

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RABIES: Reports of rabies were first required by Chapter 381, laws of 1911, and there have been 6 cases reported during the year ending October 31, 1912. There were 4 deaths, one occurring from an unreported case.

For reported cases and recorded deaths from small-pox, chicken-pox and anthrax, and the reported cases of trachoma, ophthalmia neonatorum and trichinosis see mortality and morbidity table number VII.

In addition to the number of letters of inquiry sent to local health officials concerning omissions to report cases of communicable diseases, 637 communications have been sent to physicians for failing to report cases of these diseases that resulted in death, as shown in the following table:

TABLE VI.

SHOWING NO. OF PHYSICIANS WHO FAILED TO REPORT.

No. of physicians failing to report cases of tuberculosis resulting in death	382
" of physicians failing to report cases of diphtheria resulting in death	18
" of physicians failing to report cases of typhoid fever resulting in death	35
" of physicians failing to report cases of scarlet fever resulting in death	4
" of physicians failing to report cases of anterior poliomyelitis resulting in death	10
" of physicians failing to report cases of malaria resulting in death	3
" of physicians failing to report cases of rabies resulting in death	1
Total	453

The figures in Table VI. show a disinclination on the part of certain physicians to obey the law as well as apathy on the part of local public health officials who fail to enforce the law in districts in which some of these violations have occurred.

The system in operation in the Division of Medical and Sanitary Inspection, by which recorded deaths resulting from reportable communicable diseases are checked against reported cases has worked uninterruptedly during the year, and to this follow-up method is very largely due the marked improvement which has taken place in the observance of the law. However, it appears that more drastic action is necessary in some cases and the plans that have been perfected to further improve this work during the coming year are expected to yield the desired results.

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MILK-BORNE OUTBREAK OF TYPHOID FEVER AT MOORESTOWN, N. J.

Moorestown is located in, and forms a part of Chester Township, Burlington County. The town is a strictly residential one in which the type of home is above the average and in which civic pride is reflected in the neat and clean appearance of both private and public grounds.

The Federal census for 1910 gives the population of Chester Township as 5,065, while information gathered from reliable sources places the present population of Moorestown, as distinguished from the Township, at about 4,000 persons, distributed among about 865 families.

There is a public water supply in the town owned by a private company, to which there are attached about 654 taps, and a sewer system, under municipal control, with about 570 house connections.

Owing to the alarm naturally created in the community by the sudden occurrence of an unusual number of cases of typhoid fever, the local board of health held a public meeting, on the evening of August 6th, to which the local medical practitioners were especially invited to be present. The purpose of this meeting was twofold, viz., to afford an opportunity for the health officials and physicians to consider the data then in hand concerning the outbreak, and to take such action for the restriction of the spread of the disease as the facts seemed to warrant.

It developed at this meeting that a strong public opinion prevailed attributing the typhoid outbreak to infection of the public water supply. This assumption was based on the fact that the supply is derived from the Pensauken Creek, which flows through a somewhat populous district, and it appears that filtration to which this water was subjected had, at times, failed to reduce the B. Coli in the filtered water to a desirable point. In fact, the suspicion against the water supply was so strong and persistent that the theory of milke-borne infection suggested by facts brought out in a study of the cases investigated up to this time, was by no means unanimously accepted.

The feeling against the water supply was doubtless further strengthened by the fact that for a long time previous, there had

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been considerable public agitation by householders in Moorestown in an effort to secure an improvement in the quality of water furnished to consumers by the local water company. However, in the absence of more complete information upon which to determine the exact source of infection causing the outbreak, the secretary was instructed to publish a statement in the press setting forth the true situation and advising the public how the dangers of contracting typhoid fever might be lessened by boiling or otherwise thoroughly heating all water, milk and other foods before use. It was hoped by this means to allay unnecessary alarm growing out of erroneous rumors then in circulation. This and other acts on the part of the local health officials in placing accurate information before the public, from time to time during the continuance of this outbreak was in marked contrast to the secretive policy so commonly followed by boards of health under like circumstances, and the results that followed fully justified the wisdom of frankly telling the people wherein the danger lies and how it may be avoided.

At the suggestion of your Inspector, the physicians in attendance at the meeting above referred to were invited to remain at an executive session, held directly following the adjournment of the public meeting. At this session various aspects of the typhoid outbreak were freely discussed, and a hearty co-operation was established between the medical practitioners and Inspectors that later proved very helpful.

A study of the records of reportable diseases in Chester Township show that no cases of typhoid fever had been reported for a period of more than four weeks prior to July 28, 1912. From July 28 to August 5, inclusive, fourteen cases were reported, all among persons residing in Moorestown proper.

In addition to the cases in Moorestown, two cases of typhid fever were reported, under date of July 29, in persons residing on what is known as the D. R. farm, located about one mile from Moorestown, in Mount Laurel Township. An investigation made at this time failed to trace the source of infection or to discover other infected persons on the dairy.

Milk produced on the D. R farm had been disposed of to a local firm of milk dealers in Moorestown, designated in this report as M. H., but inasmuch as the date of onset in the first known cases on the farm i.e., July 20, correspond to the dates of onset of the first known cases that developed in Moorestown, and further con-

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sidering the fact that persons on the farm frequently visited the town, it was thought quite possible that the two groups of cases may have had their origin in some common source of infection existing in the town, rather than that infection had been conveyed through milk coming from this farm to persons residing in the town.

However, the data gathered in the first fourteen reported cases in Moorestown showed that they were all among persons residing in families supplied with milk by the local dealers, M. H., thereby casting strong suspicion upon the milk distributed by this firm and naturally suggesting the D. R. farm as the probable source of infection for this milk.

The sale of milk produced on the farm referred to had been discontinued on August 2 by the order of the acting health inspector of Mount Laurel Township.

In order to prevent the further spread of the disease, should it later be established that infection causing the outbreak in Moorestown had, in fact, been milk-borne, an order was issued, on August 6, requiring that business should be entirely suspended on the milk depot premises until all bottles and equipment used thereon in the care and distribution of milk were sterilized, and also providing that no milk should be dispensed from the plant unless it was first heated to 145°F. and maintained at this temperature for a period of twenty minutes. This work was performed under the direction and supervision of a representative of the State Board of Health, and was continued until later developments showed the necessity of taking still greater precautions in handling the milk, as hereafter shown.

There being no provision at the milk depot for generating steam under pressure a method of pasterizing the milk was improvised which consisted in heating the milk in cans partly submerged in water raised to the desired temperature over gas flames. This process was not only slow and cumbersome but also open to the more serious objection of exposing the milk to contamination in passing it over an open cooler and in the act of bottling and capping by hand.

With these precautionary measures established, efforts to definitely determine the original source of infection were continued and a detailed study was made of each additional case as soon as re

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ported. From a careful review of the history of the cases known to have occurred on the dairy farm, and by a close study of the conditions under which the milk had been preduced thereon, the following facts were gathered:

The equipment and methods in use on the dairy were somewhat better than those usually found on dairies run in connection with general farming. The cans and utensils were subjected to flowing steam after washing, although the treatment described can hardly be presumed to have secured complete sterilization. The high priced cows had been carefully selected and part of them tuberculin tested. A score above eighty had been allowed by the State Dairy Inspectors, and the milk produced on this dairy being considered of superior quality, was much sought after by consumers in Moorestown.

Water for washing cans and utensils was drawn from a dug well located beneath the floor of a room at the rear of the main farm house. Another well at the tenant house furnished all water for the use of its occupants.

While chemical analysis of samples of water taken from these two dug wells on the premises showed a high degree of organic pollution, the water was free from B. Coli, a result probably due to efficient natural filtration which took place in the subsoil underlaying the polluted surface of the ground surrounding the wells.

As before stated, on July 29 two cases of typhoid fever were reported at the farm, one in the person of a man employed as farm hand and assistant dairyman, who lived in the family of the farm manager, and the other in the wife of the head dairyman, residing with his family in the tenant house on the farm. The onset in these two cases occured on or about July 20. Within the next few days the head dairyman showed suspicious symptoms and the three infected persons were removed to a hospital in Camden; one on July 28, one on July 29, and the other on August 3. The manager's wife and two of their five children subsequently developed the disease, the onset in their cases occurring some days subsequent to the earlier cases referred to.

The manager of the farm usually assisted the two employes with the mornings' milking, and occasionally with the evening's. He claimed never to have had typhoid fever and to have felt unusually well during the spring and summer. The only recent disturbance

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in his usual good health is said to have occurred about the middle of July, when he suffered from what then appeared to be a slight attack of grippe, supposedly resulting from exposure while at work in the fields during a storm. This slight disturbance in the farm manager's physical condition resulted in the remaining in the house for portions of two consecutive days, i. e., July 13 and 14, and he was visited and prescribed for by a different physician on each of these days.

As a result of the above history, a specimen of blood was collected from the farm manager, on August 6, which upon examination in the State Laboratory of Hygiene gave a positive Widal reaction, agglutinating absolutely in a dilution of 1 to 50. Typhoid bacilii were later isolated from a specimen of his faeces, collected on August 14. It was therefore concluded that the slight illness which confined the manager of the farm to the house on July 13 and 14, had been due to unrecognized typhoid infection, and that he had unknowingly been the sourse of infection resulting in the cases of typhoid fever which later developed in other persons on the dairy, as well as those which occurred among patrons of the local milk dealers in Moorestown, who had handled the milk produced thereon.

No convenient facilities for washing hands were supplied in the dairy barn; consequently no rule was enforced requiring that this important detail in the production of clean, safe milk should be adhered to by those who did the milking. In the case of the manager, it was learned that he frequently visited the yard privy, while on his way from the dwelling to the stable to take part in the morning's milking, and that he defecated at any convenient place when in the fields during the day. Workers in the dairy habitually used a yard privy, located conveniently near the stable, beneath which infected fecal matter was exposed to flies and domestic animals. It, therefore, requires no stretch of the imagination to see how typhoid infection might have been added to the milk during the process of milking, either from unclean hands or through the agency of flies, though recently sterilized receptacles may have been used to receive the milk.

In order to be assured that no other possible sources of infections existed among the producers of the milk handled by the local dealers, M. H., investigations were made on the nine additional nearby

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dairies contributing to the suspected supply. In cases where dairy workers gave a previous typhoid history, blood specimens were taken and examined for Widal reaction. Those investigated failed to reveal any recent illness of a suspicious nature or to locate a typhoid "carrier" to whom infection might reasonably be attributed.

The daily output of milk and cream distributed in Moorestown by M. H. amounted to about 700 quarts, all sold in bottles. Five persons assisted in the work at the milk-depot. Each of them was questioned as to whether or not he had ever suffered from typhoid fever, and, with one exception, negative histories were obtained. The senior member of the firm stated that he had an attack of typhoid fever about twelve years previously. A specimen of his blood, collected August 6, gave a negative Widal reaction.

On August 7th, specimens of blood were taken from the other four workers in the milk-depot. The specimen taken from the junior member of the firm gave a positive Widal reaction, while that taken from his son, who assisted in the work, gave a slight agglutination.

As soon as the result of these blood tests were known, the depot premises were again visited and it was found that the person whose blood had given a positive Widal reaction was then ill at his home, while the junior member of the firm, whose blood had given a positive Widal reaction, was still at work. When first questioned he claimed to be feeling quite well, but finally confessed to a tired and disinclined-to-work sort of a feeling, a condition attributed by him to the unusual mental and physical strain to which he had been subjected since the outbreak of typhoid fever had caused an interruption in the regular orderly conduct of the business. The man's temperature was taken at that time and found to be 100.2°F. This infected person was required to discontinue work in the milk-depot, and advised to consult a physician. This he did; and within a few days both father and son were admitted to a hospital where they passed through severe cases of typhoid fever.

As a result of the discovery of infected workers in the milk-depot a second order was issued, under date of August 8, requiring that the distribution and sale of milk from the premises should again be discontinued. This order was made conditional and provided that milk pasteurized in the bottle might be sold after proper

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cleansing and sterilization of the utensils used in handling the output had taken place. Lacking the apparatus to pasteurize in this manner, arrangements were made by the firm for a supply of pasteurized bottled milk to be furnished them from an entirely new source. It was further required in this order that daily physical examinations should be made, including morning and evening temperature readings, of all persons assisting in the milk-depot, and that these examinations and temperature readings should be continued over a period of, at least, fifteen days from the date on which the last infected person should have been removed.

When the outbreak finally terminated, and the data collected in the investigation of the fifty-three reported cases had been carefully tabulated and summarized, proof of the early theory of milk-borne infection was conclusively shown.

At the time this outbreak occurred, there were three firms of dealers selling milk in Moorestown, collectively distributing about 1,350 quarts of milk a day. It will be seen by the following table that no cases of typhoid fever occurred except among patrons of M. H., and those using milk direct from the D. R. farm.

TABLE I.

Milk Dealers.	Daily Amt. Sold.	No. of Cases Among Patrons.
M. H.	700 quarts	47
H.	600 "	0
S.	50 "	0
D. R. Farm	...	6
Totals....	1,350	53

While forty-seven of the fifty-three cases of typhoid fever included in this outbreak were in families supplied with milk by the dealers M. H., they only supplied about one-half of the entire amount of milk consumed in Moorestown.

Another strikingly convincing incident showing infection in the milk distributed by M. H. was recorded during the investigation in that five cases of typhoid fever developed in three out of six families, summering in Seaside Park, to whom the firm made daily shipments of milk. The milk was sent by express, in small cans,

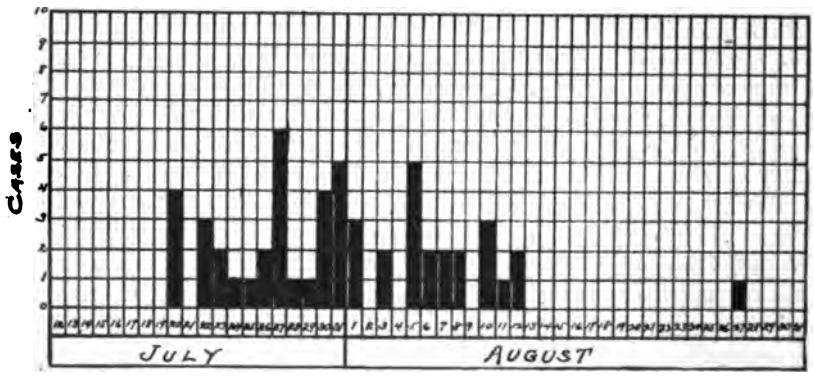
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direct to the consumers. The possibility of infections for these cases having taken place in Moorestown is precluded by the fact that none of the individuals in whom they occurred had been in Moorestown within the incubation period of typhoid fever preceding the dates of attack. In fact, two of the infected persons resided in towns located in Pennsylvania and, in so far as learned, had never been in the town from which the infected milk was shipped.

Three Moorestown residents visiting in Island Heights, and one stopping at Mount Pocono, were taken ill with typhoid fever within the incubation period following their departure from home, and each of these persons gave a history of having regularly taken milk distributed by M. H., prior to that time.

It will be seen by the following diagram that the outbreak was sharp and decisive, beginning on July 20, and that it abruptly terminated on August 12, after extending over a period of twenty-four days. It would, therefore, seem that the milk must have received a liberal and fairly constant amount of infection from about July 8 to August 1; the former date precedes by a few days that upon which the manager of the D. R. farm was confined to the house by illness, and the latter date very closely conforms to the time upon which the sale of milk from the farm was discontinued.

CHRONOLOGY OF CASES



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If it be true that the incubation period of typhoid fever is somewhat shorter in cases where a considerable amount of infection is taken into the body than when the dose is comparatively small, then it is quite probable that the incubation period in many of the cases in this outbreak was rather short, for there are several facts, that later appear, which lead to the conclusion that the quantity of infected milk distributed by M. H. was relatively small in comparasion to the total daily output, but that the infection which this milk contained was considerable. It also appears that the infection was confined to the night's milk produced on the D. R. farm.

As before stated, the farm referred to contributed about 160 of a total of 700 quarts of milk daily distributed by the local dealers. From 30 to 40 quarts of the morning's milk from the farm is said to have been separated shortly after its receipt at the milk-depot, and when not more than a few hours old. This milk furnished nearly all the cream sold by the local dealers. The remaining portion of the morning's milk, about thirty quarts, was placed in pint bottles for distribution among patrons especially desiring milk from the D. R. farm for infant feeding and for drinking purposes.

Data gathered during the investigation of the individual cases, and later verified by reference to the dealers' account books, shows that fifty families were daily or frequent purchasers of cream, yet cases of typhoid fever occurred in but three of these families and these three also used milk delivered in quart bottles. Had the morning's milk contained typhoid bacilli in any considerable numbers, it is natural to assume that the cream, separated from the milk by the centrifugal process, would have contained a proportionately larger number of the bacilli, and that the use of this cream would have been followed by a greater number of cases of typhoid fever among those who consumed it.

Again, had the morning's milk been at fault, a higher per cent. of cases would have occurred among children under five years of age who are known to have consumed much of this milk. Instead, only 9.4% of the cases in this outbreak were among children under this age, this being a markedly less percentage than usually appears in statistics of outbreaks of typhoid fever in which the infection is known to have been milk-borne. One patient, a child, eighteen months old, took no other food than uncooked milk, but

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this was supposed to be night's milk from the D. R. farm, and it was delivered in quart bottles.

TABLE II.

SHOWING AGES OF THOSE CONTRACTING THE DISEASE.

Ages.	*No. of Cases.*	*Per cent. of the whole.*
0— 5	5	9.43
5—10	8	15.9
10—20	11	20.75
20—30	5	9.43
30—40	10	18.86
40—50	4	7.54
50—60	4	7.54
60—70	5	15.9
70—80	1	1.88
	53	

Another fact substantiating the assumption that the morning's milk from the D. R. farm was innocuous is that from ten to fifteen pint bottles of this milk were daily consumed, during the midday lunch period, by about fifteen women employed in a local laundry among whom no case of typhoid fever occurred. Many of these laundry workers were between the ages of fifteen and thirty years, a period of life at which, some authorities claim, persons are most susceptible to the infection of typhoid fever. In addition to the absence of cases among these laundry employes none occurred in the homes in which they lived.

Still further proof that the morning's milk was not infected appears from the fact that there were two hundred and eighty families among the firm's patrons, in addition to the laundry workers, who received milk only in pint bottles, yet not a case of typhoid occurred among them, although all of the morning's milk from the D. R. farm that was not separated was sold in pint bottles.

TABLE III.

Cases in families receiving quart bottles only	27
" " " " qt. & pt. "	15
" " " " pint " "	0
" at Seaside Park	5
" on the farm	6
Total	53

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On the other hand, there are equally convincing facts showing that infection was contained in the night's milk. First, it was stated by the senior member of the firm, who prepared the milk for shipment to families residing in Seaside Park, that twenty-one quarts of night's milk from the D. R. farm were invariably used for this purpose each day, and no milk from any other source was sent to these customers. The balance of the night's milk, about seventy-five quarts, was placed in quart bottles. Second, two delivery wagons, covering separate routes, were used by M. H. The wagon traversing route No. 2 was in charge of the junior member of the firm, who is said to have distributed a greater portion of night's milk from the D. R. farm, and twenty-two of the twenty-nine houses in which cases occurred in Moorestown were on this route. One man, seventy-five years of age, who died on the eighteenth day of the disease, is said to have purchased and drank two quarts of milk daily, which was delivered to him in quart bottles by the driver of delivery wagon No. 2.

The methods pursued in the bottling room on the depot premises were designed to avoid mixing the milk received from different dairies, as well as the night and morning's milk from the same dairy. An eighty-quart bottling machine, with a porcelain-lined tank was in use, and the rule for its operation required that the tank should be entirely drained of each batch of milk before refilling; thus preventing any considerable extent of mixing. After the day's supply of milk had been bottled and capped the filled bottles were submerged beneath iced water contained in large wooden vats. It is claimed that at the time of loading the delivery wagons bottles of night's milk from the D. R. farm was most likely to be placed on the wagon which covered route No. 2; thus apparently accounting for the fact that more than 78.6% of the cases in Moorestown occurred on this route, as shown in Table IV.

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TABLE IV.

ROUTE.	No. of families in which cases occurred.	Total number of cases.	Percentage of cases.
No. 1	7	9	21.4
No. 2	22	33	78.6

In forty-six out of forty-seven cases, in which reliable information was obtained, the infected persons are said to have ingested raw milk as a beverage or to have taken it on cereals, and in each instance the milk was procured from M. H., or direct from the D. R. farm.

TABLE V.

Cases in persons who used milk as a beverage	25
Number who used milk on cereals	11
Said to have used milk in coffee only	1
In which no definite information was procured	6
	53

There were 23 dwellings in which single cases occurred; there were 2 cases in each of 4 dwellings, and 3 cases in each of 4 dwellings, a total of twelve secondary cases. The dates of onset in nine of these secondary cases precludes the possibility of infection by contact with preceding cases in the same house, and the evidence obtained in the investigation makes it reasonably certain that not more than one case, if any, can be directly charged to this source. The dates of onset of the cases occurring in houses in which there were multiple cases is shown in Table VI.

TABLE VI.

Two cases in each.		*Three cases in each.*		
Jul. 25	Aug. 1	Jul. 20	Jul. 26	Jul. 27
Aug. 1	Aug. 5	Jul. 23	Jul. 30	Aug. 5
Aug. 3	Aug. 10	Jul. 24	Jul. 27	Aug. 11
Aug. 6	Aug. 7	Jul. 27	Aug. 3	Aug. 10

The relative number of infected houses to the total number supplied by the dealer, i. e., one infected house to every sixteen houses

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served, is much less than the proportion of cases to the total number of occupants of infected houses, which is one case to every 3.9 persons, see Table VII.

TABLE VII.

ROUTE.	Total No. of families supplied.	No. of families in which cases occurred.	Per cent. of infected houses to total number supplied.	Total No. of occupants of infected houses.	Total number of cases.	Relative number of cases to occupants.
Route 1	210	7	8.33	31	9	1 in 3.4
Route 2	268	22	8.2	132	33	1 in 4
Seaside Park	6	3	50.	21	5	1 in 4.2
Farm	4	2	50.	12	6	1 in 2

While there may be unknown factors that might slightly change the deductions naturally drawn from the above facts and figures, they evidently indicate concentrated infection in a small amount of milk rather than slight infection throughout the entire amount distributed by the local dealers, and they conclusively prove that it was only night's milk from the D. R. farm that contained the infection. The latter fact naturally requires an explanation, to complete the history of the outbreak, that is difficult to supply, particularly so when it is recalled that the farm manager, who was apparently the source of infection, nearly always assisted in the morning's milking and but seldom in the evening. At the time of the first visit to the farm the sale of milk had been discontinued; two of the regular milkers had gone to a hospital and it was not possible to make a satisfactory study of the methods pursued in the regular conduct of the dairy. The outbreak was two explosive in character to have been the result of fly infection. It will be remembered, however, that the farm manager frequently defecated during the day in places where no suitable toilet paper was available, and that milkers did not always properly clean their hands before milking. Then, again, the evening's milk was stored on the dairy premises over night thereby affording a longer time for

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infection to take place, while the morning's milk was taken to the milk-depot soon after it had been milked. It is rather unfortunate that it was not definitely determined how and when infection was added to the milk.

The occupations of the persons who contracted the disease is somewhat varied and shows a high percentage of cases among housekeepers and others whose duties did not necessarily take them far away from their homes.

TABLE VIII.

Occupation.	*Number of Cases.*
Students	13
Housekeepers	12
House servants	2
Children under ten years of age	9
Dairymen	2
Milk distributors	2
Insurance business	2
Child's Nurse	1
Book agent	1
Manufacturer	1
Dressmaker	1
Gardener	1
Clerk	1
Book-keeper	1
Cook	1
Flagman at R. R. crossing	1
Sales manager	1
Secretary of manufactory	1
	53

The infection appeared to be of a virulent type, many of the cases being severe in character and resulting in four deaths, a mortality rate of 7.5%.

Blood tests are known to have been made in twenty-eight cases and twenty-five gave a positive Widal reaction.

As the statistics of financial losses resulting from series of cases of typhoid fever are seldom accurate or based on data which is dependable, an effort was made in the Moorestown epidemic to gather statistics on this subject. For this purpose circular letters were prepared and forwarded to each family in which a case of typhoid fever was reported, asking definite information as to the actual monetary loss due to the illness. Where replies to these letters of inquiry were not received, a representative of the division called upon the family and obtained the data.

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As a result of this inquiry, reports were received showing total expenditures in 43 of the 53 cases of typhoid fever investigated during the epidemic. Four of the ten cases from which no reports were received succumbed to the disease, and no effort was made in these cases to collect the data.

The information obtained in this inquiry is shown in the following tabulation:

1.	Money loss in wages or other earning power of 15 wage earners during illness	$2,264.46
2.	Cost of drugs and medical supplies in 22 home-treated cases	385.24
3.	Paid for nurses' salaries, in 18 cases	2,885.50
4.	Maintenance of nurse (board, etc.)	691.50
5.	Attending physicians' bills in 24 home-treated cases	1,903.94
6.	" " " in 7 hospital cases	455.50
7.	Other expenses incident to illness	1,250.42
8.	Loss of wages of members of families in nursing three patients treated at home	94.00
9.	Paid for hospital treatment, 9 cases	1,092.00
10.	Cost of hospital treatment in ten charity patients	645.00
	Total	$11,667.56

1.	Total time lost by reason of illness	366 weeks, 6 days
2.	Days patients spent in hospitals	758

CONCLUSIONS.

1. This outbreak was due to infected milk distributed by M. H., a firm of local dealers in Moorestown.

2. The infection was apparently confined to nights' milk produced on the D. R. farm, located in Mount Laurel Township.

3. The manager of the D. R. farm was presumably the source of infection.

4. In the investigation of typhoid fever on dairy premises, or among persons engaged in handling milk intended for market purposes, blood examination should not be confined to those who are ill, but should be made of all persons engaged in the work.

5. In requiring the pasteurization of milk as a precautionary measure during an investigation to establish the source of an infection of an outbreak of communicable disease, thought to have been milk-borne, the milk should be pasteurized in the bottle, or it should be cooled, bottled and capped by machinery to insure against infection during the process.

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MILK-BORNE OUTBREAK OF TYPHOID FEVER IN WOODBURY, N. J.

Woodbury is a city accredited by the federal census of 1910 with a population of 4,632. Woodbury Creek divides the city into two sections, the smaller of which is called North Woodbury, and the two branches of the stream reach out and act as natural drainage channels for the eastern section of the site upon which the city is built. Sewage from the public sewers is discharged from sedimentation tanks directly into the main stream as it passes through the northwest border of the city.

From July 7 to 8, inclusive, ten cases of typhoid fever were reported to the local board of health. While no careful investigation had been made by the local authorities to fix the source of infection causing these cases, a general belief prevailed among the citizens that the public water supply was responsible for their occurrence. This assumption was probably based on the fact that the water is a surface supply, drawn from Mantua Creek, a stream which flows through a somewhat populous district, and that repeated analyses, made by the Division of Sewerage and Water Supplies, had shown evidence of pollution in the untreated water distributed to consumers.

After discussing the situation with the local health officer, a careful inquiry was made of each case reported up to July 9, and within the next twenty-four hours detailed information had been collected in eleven cases.

The dates of onset in the first eleven cases investigated extended over a period of time dating from June 21 to July 2. Apparently the only food or drink used in common by the infected persons was milk distributed by I. P. Cloud, a local dealer. The one exception to this was a case, mild in type and not verified by blood tests, that occurred in one family in which only milk from their own cow had been used. This patient was a student who had attended a school in Philadelphia, to which city he had been a commuter during the time that infection in his case is presumed to have taken place.

In addition to milk having been supplied by a single dealer to the homes in which ten of the eleven cases occurred, each infected person gave a history of having ingested uncooked milk.

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The evidence against the milk supply was so clear, when considered together with the fact that no other common suspected source of infection was found, that an order was issued requiring that Mr. Cloud either pasteurize all milk distributed by him or discontinue the delivery of milk until further investigation had been made to more definitely fix the source of infection. The latter alternative was adopted.

THE DEPOT from which the suspected milk was distributed is located at No. 171 N. Broad Street, in what is known as North Woodbury. A lean-to shed on the back of the dwelling in which the dealer and his family reside served as a milk-house. The shed was enclosed by lattice work, the board floor was rough and broken, and a pool of stagnant water stood in a depression in the surface of the ground at the rear of the building. Cold water for washing purposes was drawn from the public supply at a tap in the shed and hot water was carried from the kitchen stove in the adjoining room. Included in the equipment was a hand bottling machine, the usual hand brushes for cleansing utensils and a wooden vat in which milk was stored in cans.

A large pile of stable manure in the yard on the dealer's premises, together with surface privies located in the yards at the rear of numerous dwellings near the milk-depot, doubtless served as breeding places for the countless numbers of flies that were crawling over the bottles, utensils and equipment in the milk-room.

DISTRIBUTION: Mr. Cloud distributed to consumers in Woodbury about 400 quarts of milk daily, one-half of this amount being sold in bottles and the balance dipped from the can. Three persons were engaged in the care and distribution of the milk and two wagons, covering separate routes, were used in its delivery to consumers. Mr. Cloud started in the milk business at his present address in April, 1911. He states that he suffered from an attack of typhoid fever eighteen years previous, while the two helpers employed claim to have never had the disease. Blood specimens from each of them gave negative Widal reaction.

THE SOURCE OF SUPPLY from which Mr. Cloud procured the milk distributed by him came from the following dairies:

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TABLE I.

No.	Name of Producer.	Daily Amount	Persons assisting on Dairy.	Date when had T.F.	Blood Test Date.	Result.
1	A. E. Budd, Woodbury.	160	A. E. Budd	No	Jul. 10	—
			L. A. Budd	"	" "	—
			Frank Budd	"	" "	—
2	C. T. Budd, Woodbury.	25	C. T. Budd	"	" "	—
			John Coston	"	" "	—
3	Wm. Goldie, Woodbury.	80	Wm. Goldie	"	" "	—
			Emerson Goldie	"	" 11	—
			C. V. Smith	"	" "	—
4	J. Briggs, Woodbury.	75	J. Briggs	1892	" "	—
			J. Briggs, Jr.	No	" "	—
			Wm. Haffner	1900	" "	—
5	P. Chorman, Blackwood.	60	P. Chorman	No	" "	—
			A. J. Chorman	"	" "	—
			Mrs. P. Chorman	"	" "	—
			Jos. Clauges	"	" "	—
			Neilson Lightner	"	" "	—
		400				

Further evidence that milk passing through Cloud's depot was alone responsible for the spread of the infection is indicated in Table II, showing a list of all dealers who supplied milk to consumers in Woodbury.

TABLE II.

Name.	Amount sold daily.	Number of cases among consumers.
I. P. Cloud	400 qts.	25
W. S. Parks	300 "	None
J. W. Anderson	250 "	"
William Joice	190 "	"
J. P. Day	150 "	"
E. C. Ellis	140 "	"
Total	1,430 "	

No history of recent suspicious illness in any persons residing on any of the dairies contributing to the supply was brought to light although a careful investigation was conducted on all of the places of production, except those delivering milk to the creamery

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from which Mr. Cloud occasionally procured small amounts. Inasmuch as all the creamery milk is said to have invariably been sold from the can to families residing in the section of the city known as "Colored North," in which no cases occurred in this outbreak the creamery supply may reasonably be excluded as a probable source of infection.

On dairy No. 3, producing 80 quarts of milk a day, it was found that cows were pastured in a meadow bordering the creek at a point just below the sewage disposal outlet.

The order closing the depot from which the infected supply was delivered was dated July 9. Additional cases continued to occur until July 26, with the single exception noted, in persons giving a history of having used milk delivered by the dealer in question, thus showing that the infection, which evidently took place in the milk about June 9, persisted in the supply for a period of one month, or until the day upon which the milk-depot was closed.

That the infection was comparatively slight and intermittent is indicated in the following table showing the approximate dates of onset in each case.

TABLE III.

Dates of Attack.	*Number of cases.*
June 21	2
" 22	1
" 23	1
" 25	1
" 27	2
" 28	1
" 29	2
July 1	2
" 2	2
" 5	2
" 9	1
" 11	1
" 12	3
" 13	2
" 17	1
" 18	1
" 26	1
Total	26

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There was nothing significant in the age period, sex or social conditions of the persons affected. The cases were evenly distributed over the section of the city covered by the two delivery wagons belonging to the dealer above named, except that in what is known as "Colored North," served with dipped milk from the creamery, no cases developed. The mortality was 11.5%, there being three deaths.

As before stated, about one-half of the amount of milk sold by Mr. Cloud was distributed in bottles and, with but two exceptions, the cases occurred in persons residing in families supplied with bottled milk. The two exceptions are: (a) One case that occurred in a family that kept its own cow, and (b) One case in the family residing in a dwelling next to the milk-depot premises, the latter being the only presumably milk-borne in which it did not appear that bottled milk was used.

TABLE IV.

Dwellings in which Cases Occurred.	No. Cases.	Date of Onset.	Milk Used. Bottled or Dipped	Av. Daily Amt. Used.	No. Persons in Family.
110 Holroyd Place	A*	Mar. 15	Bottled	1 qt.	7
261 N. Broad St.	B*	Apr. 20	"	1 "	4
48 West Street	1	Jun. 21	Bottled and Dipped	3 pts.	3
376 Salem St.	1	" 21	Bottled	1 qt.	2
72 Euclid Ave.	1	" 22	"	3–4 qts.	7
175 N. Broad St.	1	" 23	Dipped	?	8
34 Cooper St.	1	" 25	Own Cow		6
Hendry's Court	1	" 27	Bottled	1 qt.	5
Centre Street	1	" 27	"	3 pts.	4
82 Hunter St.	1	" 28	"	3 "	2
98 Wallace St.	1	" 29	"	1 qt.	2
48 Penn St.	1	" 29	"	3 pts.	2
148 Emerson St.	1	Jul. 1	"	1 pt.	4
110 N. Broad St.	2	" 1	" and Dipped	1 qt.	3
83 Hunter St.	2	" 2	"	1–2 qts.	4
266 S. Broad St.	1	" 2	" and Dipped	1 pt.	6
20 E. Chestnut St.	1	" 5	"	1 qt.	3
310 Glover St.	1	?	"	1 "	3
110 Holroyd Place	1	" 9	"	2 "	4
10 Dare Street	1	" 12	"	1 "	6
76 German St.	1	" 13	"	1 "	5
126 Hunter St.	1	" 11	" and Dipped	2 "	5
35 Centre St.	1	" 18	"	2–3 qts.	3
231 Poplar Ave.	1	" 17	"	1–3 pts.	4
38 High St.	1	" 12	"	3 "	5
50 Cooper St.	1	" 26	"	1 qt.	5
	26			31 "	103

* Cases preceding outbreak proper.

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In addition to the fact that all but one of the families in which cases occurred received milk from Mr. Cloud, each infected individual gave a history of having ingested the raw milk. It was persistently reiterated by numerous persons who were interviewed that at least *one* infected person in one of the families receiving this milk and in whom the disease *proved fatal,* had never used milk in any form. This impression grew out of a statement made in good faith by the victim's wife. Careful inquiry, however, elicited the fact that this individual invariably ate for his breakfast shredded wheat biscuit, cream and coffee, and that the cream which was eaten with the cereal was always taken from quart bottles of milk delivered by the milk dealer.

It appears from the data gathered that the infection which caused this outbreak was only contained in the milk procured from Cloud's depot, and was further restricted to milk distributed in bottles. A careful inquiry into the method of handling and bottling the milk at the depot failed to offer any explanation of this fact.

It hardly seemed probable that infection was introduced in the milk produced on dairy No. 3 as a result of the cows pasturing in a meadow bordering on the creek just below the point at which sewage from the city is discharged into the stream, although it is claimed that these cows frequently soiled their udders by wading in a ditch, the waters in which are visibly fouled with sewage matter, and the milk from this dairy is said to have invariably been bottled.

Two common and reprehensible practices indulged in by the dealer were brought out in the investigation which may account for bottle infection. They were: (a) the custom of daily removing bottles from the houses in which cases of typhoid fever were under treatment, and (b) the habit of frequently refilling bottles on the delivery wagons without further cleansing than that which they had received in the individual houses from which they had just been removed. These practices continued up until the day on which the investigation began.

In looking for other possible sources of original infection of the dealer's bottles, two cases of typhoid fever that existed in the City of Woodbury preceding the outbreak proper were learned of and investigated. The history in these cases shows that the first

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one occurred about March 15, at 110 Holroyd Place, and the other on April 16, at 261 North Broad Street. Both cases were in children between the ages of five and six years. Infection in the first case must have taken place in Woodbury, but the latter case resulted from infection known to have been contracted in Collingswood. Both children were treated at their homes and each child was nursed by its mother who washed milk bottles daily removed from the infected houses by the drivers of Mr. Cloud's delivery wagons.

Whether or not typhoid infected bottles were in fact removed from either of these infected houses and refilled on the delivery wagon could not be definitely established.

Again, large numbers of flies were present in the bottling room in the milk-depot in which this milk was handled and flies had free access to the bottles both before and after they were washed. It is likewise true that flies soiled the bottling machine and other utensils, in which both dipped and bottled milk was handled, with the same freedom with which they soiled the bottles.

The washing of bottles, as performed at the milk-depot, could in no way be depended upon to free them from infection. The supply of hot water was limited; there was no steam for sterilizing, and the absence of wash trays with running water discouraged frequent change of both wash and rinse waters.

Failure on the part of Mr. Cloud to arrange for pasteurizing milk when his depot was closed, on July 9, diverted the milk which usually passed through his depot into other channels. There being no evidence gathered in the investigation that would warrant shutting off the supplies at the places of production, the producers sought a new outlet for their product. That no typhoid followed among the new customers of this milk argues that the infection was probably introduced in the milk after it had come into the hands of the local dealer.

The order issued July 9 prohibiting the sale of milk from the depot was rescinded on July 16, after the dealer had gathered in his empty bottles for sterilization, together with all cans and other utensils used in connection with the business. At the same time the order was withdrawn the following order was served on the dealer, under the provisions of chapter 231, of the laws of 1909:

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"This Board having information tending to show that the milk-depot conducted by you on the premises at No. 173 North Broad Street, Woodbury, Gloucester County, is not maintained in a condition of cleanliness required by section 2 of chapter 231, of the laws of 1909, it is hereby ordered:

1. That the side walls, floors, machinery and utensils used in storing and handling milk on said premises shall at no time be permitted to remain in an unclean or unsanitary condition.

2. All milk, milk products, bottles and utensils in which milk or milk products are stored or handled on said premises shall be protected from flies, dust, dirt and, so far as the same is possible, by the use of all reasonable means, from all other foreign or injurious contamination.

The above order is issued in accordance with the provisions of section 9 of the act above referred to."

Directly following the first interruption to the business, Mr. Cloud began the construction of a cement concrete milk-house in the yard on his premises; installed a steam boiler, pasteurizer and a steam sterilizer, with the result that he now has the best equipped milk-depot for conducting a clean, safe milk business that exists in the City of Woodbury.

Business was resumed by Mr. Cloud under improved conditions, on July 29, and, although milk has since been received from the same sources from which it was drawn preceding the outbreak, no new cases have appeared among the users of milk from his depot since the expiration of the incubation period of typhoid fever following the date on which the milk-depot was closed and a general cleansing of equipment took place.

CONCLUSIONS.

1. The infection which caused twenty-five of the twenty-six cases of typhoid fever that resulted in three deaths in the City of Woodbury, between June 21st and July 26th, was distributed through milk delivered by Mr. I. P. Cloud.

2. The infection was confined to milk delivered in bottles.

3. Infection of the milk appears to have taken place after delivery to the local dealer, or to have been in milk delivered from

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the dairy on which cows frequented a sewage-polluted stream, probably the former.

4. Infection of the milk first took place about July 6 and continued in the milk until abruptly shut off by the order closing the milk-depot on July 9th.

5. Cleansing and sterilizing the containers and utensils used in handling the milk evidently destroyed any typhoid infection which they may have contained.

6. Had there been proper equipment in the milk-depot from which the infected milk causing this outbreak was distributed, and had safe and cleanly methods been practised at all times in handling the supply, the sickness and deaths which attended the outbreak would not have occurred.

REPORT OF AN OUTBREAK OF TYPHOID FEVER AT THE STATE VILLAGE FOR EPILEPTICS.

As the name of this Institution implies, it is a village or community in which epileptics are treated and cared for by the State. They are housed in widely separated buildings, each conducted independently of the other, thus creating conditions very closely approaching those found in the ordinary small town; differing only in that the village is under the general supervision and management of a superintendent, and a uniform high standard of cleanliness and order is secured both in the building and about the grounds.

There are 16 dwellings in which about 381 inmates and 108 officials reside, making a total population for the village of 489. In addition there are 17 regular employees who do not reside at the village, and, during the past winter and spring, a varying number of mechanics have been engaged in the construction of new institution buildings on the grounds.

Groceries, meats, provisions and other necessary household supplies are regularly distributed from a general store and milk is daily delivered to each dwelling from a well-conducted dairy run in connection with the institution.

The village is provided with a general water supply and sewer system. The bulk of the water consumed is drawn from a surface supply collected from a watershed upon which there exists known direct sources of pollution, including seepage from cesspools.

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This water, after mechanical filtration and treatment, with hypochlorite of lime is mixed with a given amount of deep well water and distributed, by gravity, to the various buildings. Ice for general use in the institution is harvested from the pond in which the surface water supply is empounded preceding filtration and treatment.

The State Inspector found upon his arrival at the institution on June 21 that one of the staff of physicians had been sent to a hospital on June 13 as a typhoid fever suspect. A definite clinical diagnosis of typhoid fever was later made in this case and confirmed by a positive Widal reaction on a specimen of blood examined at the State Laboratory on June 17. Up to the time of illness the infected person had resided in Bergen Cottage, but inasmuch as he had been away from that institution on numerous occasions during the incubation period preceding the date of onset, there was no particular reason to suspect that infection had been contracted at the institution.

One of the female attendants in Bergen Cottage was also ill and under observation at this time. The definite onset in her case occurred on June 13, but no physician was consulted until the 17th. Rose spots were noted on June 21, and the patient was removed to a hospital on the following day. In this case the patient had not been away from the institution grounds for about three months immediately preceding the date of her attack, so that infection for this case, at least, must have occurred at the institution.

In addition to the above named cases, the first assistant physician and one male attendant, both residing in Bergen Cottage, were slightly ailing with ill-defined symptoms, as was one of the employes residing in Fernwood Cottage; the latter being a man whose duties consisted in delivering milk from the dairy and supplies from the village stores to the various cottages. This man also removed soiled body garments and bedclothing from the cottages to the main laundry building. Within the next few days these three suspicious cases developed so that a positive diagnosis of typhoid fever was made in each case and the patients were removed to the hospital; two of them on the 26th and one on the 27th of June, thus making four cases from among the occupants of Bergen Cottage, and one in the person of a man residing in Fernwood Cottage, who daily visited Bergen, and, as was later shown, fre-

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quently ate light lunches furnished him in the kitchen while there.

Up to this time inquiry to locate the source of infection, though beginning in Bergen Cottage, had been extended to include avenues of possible infection common to all parts of the institution, such as the water supply, milk supply, and general food supplies, as well as the possibility of infections having taken place while the persons in whom the disease later developed were away from the institution grounds. These possible sources were all, in turn, excluded, and efforts were mainly concentrated on Bergen Cottage as the most likely spot to find some common source.

In Bergen Cottage, known as the Children's Building, 48 male and 46 female inmates were housed, a total of 94 children. In addition to these, twenty employes took meals in this building, and a number of them also occupied sleeping quarters therein, thus making 114 persons spending a greater part of their time in Bergen Cottage.

This building is designed so that male and female inmates can be cared for in separate parts of the building, thereby securing practical separation of the sexes, in so far as the inmates are concerned, even to the use of separate dining rooms and playgrounds. The only close association that takes place between male and female children occurs while they are in the schoolroom.

Meals are served in five separate dining rooms in Bergen Cottage; one for the use of physicians, one for supervisors, one each for male and female inmates and one for the attendants, the table at which the attendants eat being spread in an offset in the kitchen in which the food furnished for all of the tables is prepared.

The food supplies for Bergen Cottage are drawn from the same sources and consist of the same class of articles as are furnished in other buildings on the grounds.

Up to this period, June 27, two of the five then known cases, had occurred in persons eating at the physicians' table, two at the attendants' table and one in the person of the delivery man who occasionally took food and drink in the kitchen at Bergen Cottage. This person was not, however, suspected of being the source of infection causing the outbreak, because his case was not the first to occur, and, besides this, no cases had developed in persons residing in other cottages to whom he had practically the same relations.

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On June 29, another physician was sent to the hospital, and on the following day one of the teachers followed. This made seven cases in which the dates of onset ranged from June 10 to 22, and included among them were persons from the physicians', supervisors' and attendants' tables, the inmates thus far escaping.

No two tables were attended by the same waitress. No article of food through which infection was likely to be conveyed was found to be common to employes alone. The fact that no inmate had thus far shown infection did not, however, remove the suspicion that the food supply in Bergen Cottage was somehow at fault, particularly so when considering the fact that 79 of the 94 inmates in this building had been vaccinated with anti-typhoid vaccine nine months previously, because of an outbreak of typhoid fever that occurred in the same cottage during the month of September, 1911. Furthermore, there were at this time several indisposed inmates under observation with suspicious symptoms. Three of these suspicious cases, whose work brought them frequently in the kitchen, later proved to be typhoid, thus adding three children from the girls' side of the building to the list of cases. They were shortly followed by two more supervisors and another attendant, bringing the total number of cases up to thirteen, all occurring among persons who took meals in Bergen Cottage.

It is also true that only persons residing in Bergen Cottage were infected during the outbreak in September, 1911.

A fact of interest is that the three inmates affected were from among those previously vaccinated, none of the fifteen unvaccinated children admitted to Bergen Cottage since the outbreak in 1911 contracted the disease. That the infection causing the recent outbreak was probably less virulent than that responsible for the former is shown from the fact that two of the four patients in the 1911 outbreak died as a result of the infection, while no fatalities resulted from the thirteen cases in the outbreak of 1912.

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TABLE SHOWING DISTRIBUTION OF CASES AMONG OCCUPANTS OF BERGEN COTTAGE.

Case No.	*Personnel.*	*Sex.*	*Date of onset.*	*Sent to Hosp.*	*Dining Room in which meals were taken.*
1	Psychologist	M	June 10	June 13	Physicians'
2	Attendant	F	" 13	" 22	Attendants'
3	Attendant	M	" 13	" 15	Attendants'
4	Delivery	M	" 14	" 26	Kitchen
5	Physician	M	" 13	" 27	Physicians'
6	Teacher	F	" 15	" 30	Supervisors'
7	Physician	M	" 22	" 29	Physicians'
8	Inmate	F	July 1	July 4	Inmates'
9	Supervisor	F	.....	" 4	Supervisors'
10	Attendant	F	.....	" 2	Attendants'
11	Inmate	F	.....	" 6	Inmates'
12	Inmate	F	.....	" 6	Inmates'
13	Supervisor	F	July 4	" 6	Supervisors'

Two cooks are regularly employed in Bergen Cottage and they are assisted about the kitchen by several of the more competent inmates. Prior to this outbreak, the head cook, who came to the institution November 1, 1911, had been transferred for service to the kitchen in another building where she remained from May 27 to June 13, covering the period of time during which infection for the first six or seven cases in this outbreak evidently took place, and her place in Bergen Cottage had been filled during this time by the "relief" cook, who came to the institution May 9, 1912, and whose duties took her to the kitchens in the various institution buildings. These facts apparently removed any suspicion that may have rested on these two persons as a probable source of infection. The inmates assisting about the kitchen have all been in the institution for many years; each of them was vaccinated with anti-typhoid vaccine nine months previously, and none of them is known to have ever had typhoid fever.

The assistant cook came to the institution on July 19, 1910, and she has been constantly employed in the kitchen in Bergen Cottage since that date. She claims not to her knowledge to have suffered from typhoid fever. However, specimens of fæces were secured from her and other kitchen workers on June 29th, and blood specimens were taken from both of the regular cooks on July 2nd, just prior to administering anti-typhoid vaccine.

The specimen of blood taken from the assistant cook gave a positive Widal reaction, agglutinating absolutely in a dilution

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of 1 to 50, while the specimen from the head cook was negative.

Up to this time suspicion had not been directed toward any particular individual, but as the result of the blood tests the assistant cook was at once looked upon as a possible typhoid "carrier" and relieved from work in the kitchen. Another specimen of blood taken from her on July 2nd also gave a positive reaction, as likewise did a third specimen examined on July 10. The result in the case of the latter specimen may have been influenced by the first injection of anti-typhoid vaccine, given on July 1, but this could not have been true in the first two specimens.

Another interview was then held with the assistant cook and, for the first time, information was obtained showing that she had twice been treated in a hospital; first in the Dixie Hospital at Elizabeth City, Virginia, and subsequently, during the year 1897, in St. Vincent's Hospital, at Norfolk, Virginia, remaining in the latter institution for a long time ill with a fever, the nature of which the cook claims to be in ignorance. A communication addressed to the St. Vincent's Hospital is met with the records of that institution, covering the period of time in question, were destroyed by a fire. The physician who attended the individual under discussion, while she was a resident of Norfolk, states that he does not now recall having treated her for typhoid fever.

A bacillus was isolated in the State Laboratory of Hygiene from the specimen of fæces collected from the suspected cook on June 30 that resembled the B. Typhosus in every particular, except that it was rather short. It was not quite so motil as the usual typhoid bacillus and, when first isolated, agglutinated incompletely at 1 to 50. After this organism had been grown for several generations on various culture media and had been passed through guinea pigs, to which it was highly pathogenic, it agglutinated absolutely in 1 to 50 dilution in blood serum from the person from whose fæces it had been recovered, and also the blood taken from several known typhoid patients. An identical organism was also isolated from a specimen of urine collected from the suspected cook on July 6th.

Owing to the peculiar behavior of this bacillus when first isolated, and to avoid the difficulties and uncertainty hedged about the recovery of typhoid bacilli from fæces of typhoid "carriers,"

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it was decided to attempt to secure a specimen of bile through a duodenal tube, hoping in this was to establish the presence or absence of typhoid bacilli in the gall bladder secretions. This was made possible by willingness on the part of the cook to co-operate, and through the very generous offer of Dr. Alfred F. Hess, of New York City, to conduct the experiment. The tube was successfully passed but no bile was obtained, the gall bladder not secreting during the one hour that the tube remained in the duodenum. However, a quantity of intestinal juices was aspirated that proved upon examination to be free from typhoid bacilli and practically sterile. The departure of the cook from the institution and from the State before other specimens were obtained prevented further investigation along this line.

In as much as the specimen of blood taken from the assistant cook just before she was vaccinated, on June 21, agglutinated absolutely in a dilution of 1 to 50, and that a baccillus corresponding to the B. Typhosus was isolated from her fæces and urine, it is concluded that the assistant cook in Bergen Cottage was a typhoid "carrier," notwithstanding the fact that it has not been possible to show beyond a doubt that she had ever suffered an attack of typhoid fever.

As a result of the outbreak of typhoid fever that occurred at the institution nine months previously, there were four cases and two deaths. The infection was confined to persons residing in Bergen Cottage. The first case was in the person of the head cook, who died as a result of infection thought at that time to have been contracted on one of two occasions while she was away from the institution, and she was believed to have in turn infected the other three persons in whom the disease subsequently developed. Two facts not entirely fitting in with this theory were that the first date on which the head cook was absent from the institution was rather far removed, and the other date entirely too close to the presumable date of onset to correspond to the usually accepted incubation period of typhoid fever.

The question may very properly be asked: If the assistant cook was a typhoid "carrier" at the beginning of the recent outbreak, was she not also a "carrier" at the time of the preceding outbreak, and if so, why was this fact not discovered at that time? The answer to the first part of the question is, yes. The

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latter part of the query may be replied to as follows: When the inquiry began to center on Bergen Cottage in the investigation of the present outbreak it was assumed that repeated blood specimens had been taken from the assistant cook for Widal tests during the preceding outbreak, as will appear from the following quotation taken from page 4 of the report on the investigation of the former outbreak: "As a means of detecting infected persons who might possibly escape observation by physical examinations, blook specimens were taken for Widal tests from each person residing in Bergen Cottage. This work was begun on September 11 and continued until the danger of other cases developing was thought to have passed."

Reference to the laboratory records of blood examinations, made during the outbreak referred to in the above quotation, shows that, in some unexplainable way, the assistant cook escaped the vigilance of the inspector and also of the physicians collecting the blood specimens, for it is now known that no examination of blood was made in her case. She was also one of the employes who refused anti-typhoid vaccination when offered at that time.

From a careful consideration of all the data gathered in the epidemiological study of the recent outbreak, when compared with the history of the cases which occurred in the same building nine months previous, the following conclusions are drawn:

The source of infection causing both outbreaks was confined to Bergen Cottage.

2. In the former outbreak the number of cases was too small to trace the source of infection with any degree of certainty, but in the recent outbreak the infection was apparently transmitted through some article of food or drink infected in Bergen Cottage.

3. The Widal reaction given by the specimen of blood blood taken from the assistant cook referred to in this report, together with the result of the bacteriological examination of her faeces and urine, shows that the cook was a typhoid "carrier," and, by infecting the food supply, was unknowingly the cause of the recent outbreak, and possibly the outbreak that occurred in the same building nine months preceding.

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EDUCATIONAL CONTROL OF TUBERCULOSIS IN NEW JERSEY.

An act appropriating $10,000 a year to be used in educational work for the prevention of tuberculosis in New Jersey was approved and became a law March 14, 1910.* The first annual appropriation was available for use during the year beginning November 1, 1911. This year has just closed, and it is now time to inquire what returns the State has received for the expenditure of this fund.

In stating how the money appropriated should be expended, the law makes the following specific provisions: "The State Board of Health shall use the appropriation provided for educational and practical purposes in the study, treatment and prevention of tuberculosis, by (1) the publication and distribution of literature regarding and relating to this disease; (2) in the creation and maintenance of a State Tuberculosis Exhibit, which shall be at the disposal of all communities in this State applying for its use locally, subject to such regulations as the Board of Health may adopt; (3) and in the maintenance of a special tuberculosis inspector, or inspectors, to be appointed by the State Board of Health, whose duties shall be to enforce existing laws concerning registration of tuberculosis cases, to advise local boards of health concerning disinfection, to inspect hospitals and sanatoria treating tuberculous patients, and no report on same to the State Board of Health, and to perform such other duties as may be ordered by the State Board."

*Chapter 12, Laws of New Jersey, 1910.

Construction of Exhibit.

The first work undertaken by the Tuberculosis Inspector appointed under this act was the construction of an exhibit, The State Tuberculosis Association Exhibit, which was placed at the disposal of the Board, was examined with a view to using it as the basis for the construction of a new exhibit.

Entirely New Exhibit. After careful consideration it was decided to build an entirely new exhibit and keep the old one intact

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for loaning purposes. The wisdom of this course has been amply demonstrated by the fact that at different times the old exhibit has been loaned, and two exhibits have thus been in use at the same time.

PURPOSE OF EXHIBIT. The exhibit has been planned with special reference to the giving of definite and accurate information concerning tuberculosis and its prevention. The importance of accuracy in teaching scientific facts has not been sufficiently appreciated in the tuberculosis campaign heretofore. A tremendous amount of interest and enthusiasm has been aroused, but the information imparted to the public has sometimes been vague, indefinite, and even inaccurate. This fact is responsible for some of the results of the campaign that have been more or less deplored by persons who are sincerely interested in controlling tuberculosis. For example, the undue fear of the disease or "phthisiophobia," which hinders the proper registration of cases by offering an incentive to the patient to conceal his true condition, and which makes the location of hospitals and sanatoriums somewhat difficult, may be charged to inadequate information. The proper dissemination of accurate and definite knowledge is the best possible way of combating this foolish fear.

ORIGINALITY. By building an entirely new exhibit it was possible to plan for its construction along original lines. The plans were drawn to cover the entire scope of the subject of tuberculosis and present the essential facts concerning its nature and extent, its manner of spreading, the conditions under which it thrives, means by which it may be cured, and methods of prevention. These various facts are presented briefly, logically, and in language that any one can understand.

A special attempt has been made to indicate the relative importance of the various facts by the amount of space given them in the exhibit. A large part of the exhibit of pictures deals with prevention. This has seemed the most important phase of the problem to be presented to the public.

The logical order of arrangement and the relative emphasis given the various phases of the subject may be indicated by the following list of sections:

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Section	I.	THE NATURE & EXTENT OF TUBERCULOSIS.	(12 frames)
"	II.	THE GREAT COST OF THE DISEASE.	(12 frames)
"	III.	HOW TUBERCULOSIS SPREADS.	(15 frames)
"	IV.	WHERE TUBERCULOSIS THRIVES.	(15 frames)
"	V.	HOW TUBERCULOSIS IS CURED.	(15 frames)
"	VI.	HOW TO PREVENT TUBERCULOSIS.	(18 frames)
"	VII.	WHAT YOU SHOULD DO TO PREVENT IT.	(18 frames)
"	VIII.	WHAT YOU SHOULD DO TO PREVENT IT.	(18 frames)
"	IX.	YOUR COMMUNITY'S WORK IN PREVENTION.	(18 frames)
"	X.	THE LAW & TUBERCULOSIS.	(18 frames)

ATTENTION TO DETAIL. Satisfactory results require very close attention to each minute detail of execution as well as of plan. For example, the effectiveness of an exhibit may be much impaired by permitting the sign painter to select the style of lettering. In order to be sure of good lettering, several samples were obtained and specific directions were given the sign painter concerning the size and shape of the letters, the width and uniformity of stroke composing the letters, the spacing of letters, the marginal space, and the space between lines. By this method a style of lettering was secured which is at the greatest possible distance. The importance of a mere detail like this can be appreciated best by one who has seen a large amount of exhibition material.

Many other details also required careful attention. The exhibit is so constructed that it is entirely independent of walls. All of the pictures can be hung without driving a single nail or screw. The frames are hung by an ingenious device that was invented for this exhibit. They are as light as possible to reduce the shipping weight. The surface of the card-board used for mounting the pictures and for lettering is perfectly smooth and will not catch dust. This simple detail will practically double the life of the exhibit.

The amount of lettering has been reduced to the smallest possible proportions consistent with properly telling the story. This, with the very legible letters, permits visitors to read the exhibit as they read the newspaper, by a glance at the headlines.

COLOR SCHEME. A pleasing color scheme is of much importance. A careful study resulted in the use of black and white toned pictures and black lettering on a light-brown card. For the cards a very warm shade of brown was selected and they were mounted in dark-brown frames. Dark-green burlap is used as a background. The effect is so restful to the eye that it is really easier to look at the exhibit than to look elsewhere.

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NEW PICTURES. Very few suitable pictures were available to illustrate the subject. It was necessary to go out with a camera and take most of the hundred or more photographs used in the exhibit. A double advantage was thus gained, in that the pictures are both new and represent New Jersey conditions.

SPECIAL FEATURES.

In addition to the picture part of the exhibit several special features have been included in its construction.

MODELS OF SLEEPING-OUT EQUIPMENTS. One model shows an outdoor bedroom that may be constructed for about $20.00, a sitting-out bag thatany one can make for about $1.50, and an entire equipment for rest out of doors, are all shown by means of models.

DEATH RATE FLASHER. One of the most impressive single features of the exhibit is a light that goes out every half-minute to indicate the frequency of death from tuberculosis in the civilized world.

CONTRAST ROOM ILLUSION. An illusion which shows a miniature dark room, then a light room in the same place, shifting from one to the other at short intervals, is a never failing source of interest to old and young alike. Life-size contrast rooms, furnished by the local committee, are very effective in creating higher standards of living conditions.

PATENT MEDICINE FLASHER. The patent medicine flasher, used for the first time in this exhibit, is a clever and unique device for representing in a word the truth about patent medicines. It is simply a large bottle labelled "Dr. Fako's Consumption Cure, Guaranteed." Inside the bottle is a light which intermittently illuminates a skull and crossbones and the word "poison," which then appear as additions to the label.

PATHOLOGICAL SPECIMENS. A few pathological specimens have been obtained, but owing to difficulty in transportation and their questionable value for exhibition purposes this material has not been extensively used.

CARTOON-BANNERS. The New York Cartoon-Banners that have been used all over the world in the tuberculosis campaign, are put

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up when there is room for them. Miniature reproductions of them appear in the folder, "How to Prevent Tuberculosis," which is distributed at the exhibit.

Food Exhibit. For several years the public has been taught that the cure of tuberculosis consists in rest, fresh air and good food, and that these requisites to a cure are also important factors in prevention. In all tuberculosis exhibits great emphasis has been placed upon methods of getting rest and fresh air. Little or nothing has been said concerning food. About as fas as we have gone in teaching people what constitutes good food is to mention milk and eggs as typical examples. When one realized that eggs cost most per unit of food value than almost any other common article of diet, and that many tuberculosis patients are scarcely able to purchase any kind of food, the absurdity of recommending eggs as a necessity it as once apparent. In these days of the high cost of living we must give due consideration to the question of economy. This fact emphasizes the importance of promulgating definite and reliable information concerning good food values in our tuberculosis work. The addition of a specially designed and carefully constructed food exhibit to the New Jersey State Tuberculosis Exhibit is an attempt to meet this need. The New Jersey State Exhibit has originated this kind of material for a tuberculosis exhibit. It is also the originator of the method of representing articles of food by means of paper pulp models for educational exhibition purposes.

In this connection it is desired to acknowledge obligations to Miss Madge Headley, Secretary of the New York Tenement House Committee, for suggestions, and especially to Miss Winifred Gibbs, Dietician for the New York Association for Improving the Condition of the Poor, for invaluable services in working out the details of the exhibit.

The food exhibit is in two parts. In the first part paper pulp models of food ready to serve are used to show a sample day's rations in a balanced diet for a man with tuberculosis. The cost of the raw material is about $.34 (estimate based on buying in family quantities). Sufficient food of coarser quality may be purchased at less cost. A woman or child would require less food than a man. Explanatory notes and tables are given on appropriate cards.

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It is not recommended that the same menu be used every day. This one day's food is shown merely as a sample.

The other part of the food exhibit consists of tables and models showing comparative food values of several common articles of diet. The comparison is based on the amount of heat supplied and not on the amount of strength given. In other words, it is based on caloric units and not on proteid units.

The planning and construction of this new feature required time. It was not ready for use until a short time ago. Already it has attracted much attention. Crowds of people gather around it and study it with great care. Very favorable comments indicate that in taking up the food question and trying to give some definite information concerning it, we are really meeting a perhaps silent though imperative demand.

MOTION PICTURES. Undoubtedly the most important educational device that has been brought forth in modern times is the motion picture. One has but to see the immense throngs that go to the photoplay to appreciate the hold that motion pictures have upon the imagination. In order to utilize the motion picture to the fullest extent, a complete projection outfit and five of the best health films were made a part of the exhibit. These are: "The Man Who Learned," "The Red Cross Seal," "The Awakening of John Bond," "Boil Your Water," and "The Fly Pest." No other films of much value were available a year ago. Several new ones have since appeared, some of which will be added to the exhibit in the near future.

As an advertising asset motion pictures are of prime importance. There have been so many tuberculosis exhibits that their novelty has ceased to draw crowds. The mere announcement of "Free Motion Pictures" will insure a packed house for the tuberculosis show.

In selecting a motion picture outfit for this kind of work careful consideration must be given to its safety from fire, reliability of the take-up device, quality of picture the machine will produce, stability of the mechanism, the lamp and lamp house, the rheostat, the stand, motive power, the booth, inspection and transportation.

One of the unforeseen difficulties in the use of motion pictures resulted from the passage of a law last winter specifying the kind of booth that must be used to enclose the machine. An asbestos

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cloth booth, such as is generally used for road work, had to be discarded and an asbestos board booth purchased. The cloth booth in a neat case weighs a little over two hundred pounds. When crated, the board booth weighs nearly a ton, which adds considerably to the transportation expense, especially when quick jumps require shipment by express.

It is not believed that the board booth offers any more protection from fire than the cloth booth, in fact, some think that the cloth booth is really superior to the board. For convenience in travelling, it is certainly preferable.

Enforcement of the law is very lax. In one building where the board booth was used with the exhibit, a regular motion picture show was running three days a week with a cloth booth. In another theatre that was considered as a possible place to hold the exhibits, a wood booth was installed. The authorities in some of the large cities permit the use of metal booths which do not meet the requirements of the law. A careful reading of the law (Chap. 197, laws of 1912) shows that it is meant to apply only to the permanent installation of a motion picture machine. No provision is made for temporary use by a travelling show like the State Tuberculosis Exhibit. It is believed that the law should be amended to permit the State Board of Health to use an asbestos cloth booth. This can be done without in the slightest degree increasing the danger to the public. It is hoped that such action will be taken at the next session of the Legislature.

Literature.

The law provides that literature on tuberculosis shall be printed and distributed.

A two-color folder, "How to Prevent Tuberculosis," which is designed to meet this requirement has been printed and distributed in large quantities. It is said to be one of the best publications of its kind. A circular of instructions to patients will be issued soon. Later a leaflet on food, and possibly a special leaflet for children, will be prepared.

For general publicity purposes, a sixteenth sheet dodger, which invites everybody to "talk tuberculosis" during the exhibit, is often used. It contains several questions designed to arouse interest and

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curiosity. A few post cards printed as an experiment have not been used extensively. Tags bearing a reminder of the exhibit have proven exceedingly popular with children. Half sheet posters giving the time and place of the exhibit, and sixteenth sheet dodgers giving the program have been found effective and economical for advertising purposes.

COST OF THE EXHIBIT. A minimum expenditure consistent with the highest quality has been the aim. The actual cost has been as follows:

Exhibit Material	$1,391.34
Motion Picture Equipment, including films	1,131.51
Salaries and traveling expenses during construction.	1,093.91
Total	$3,616.76

SYSTEMATIC SCHEDULE. At first no itinerary for the exhibit had been arranged. For a month or two it was necessary to make engagements wherever possible in order to keep busy. Then a regular systematic schedule with short moves was begun.

SHORT MOVES. The advantages of short moves that can be made in wagons instead of by rail are: cumulative interest, lower cost of transportation, less damage to exhibit material in transit, easier advance organization work, and more frequent use of the exhibit. In Newark, Monmouth County and Bergen County, a week for from three to five weeks in succession was made possible by short moves. Shipping by rail requires at least a week between exhibits.

ADVANCE WORK. Before an exhibition is held, it is necessary to organize the community's forces for publicity. Sometimes several visits must be made to complete preliminary arrangements. So important is this advance work that the success of the exhibit may be said to depend upon it. An additional inspector is needed in order that it may receive more attention.

CO-OPERATION. Local boards of health and educational and voluntary associations, like tuberculosis leagues, civic associations, relief societies, visiting nurse societies, women's clubs, lodges, churches, etc., everywhere have given splendid co-operation, and have contributed much to the success and effectiveness of the exhibit.

METHOD OF ORGANIZATION. The inspector in charge of the exhibit meets the local committee and discusses means by which they

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can assist. It is pointed out that the whole problem is one of publicity. The exhibit is a mere tool with which to work. One may do good work with a poor tool or indifferent work with a good tool. The value of the exhibit depends entirely on how it is used—on how much publicity is secured by its aid.

Every effort is made to impress the committee with the necessity for carrying on the publicity work without assistance from the exhibit management. In fact, the conditions upon which the exhibit will be taken to a locality are that a suitable hall or auditorium be provided, that advertising literature which the State furnishes be properly distributed, and that an effective organization for publicity work be formed. The last point is emphasized as the most important of the three.

Local Committees. The formation of a general committee is the first step in organizing. This committee should act as the business or executive committee and should have general charge of the campaign. It is also suggested that, if desired, advisory or honorary committees composed of persons whose names will give prestige to the work may be named. The appointment of several prominent citizens on this committee will assist in the press publicity.

In addition to the general committees, it is always recommended that for each piece of work to be done, a special committee be formed. As many persons as possible should be placed on special committees for the purpose of enlisting their services and stimulating their interest. There should be a program committee to arrange the programs for the meetings. A reception and demonstration committee to be present at the exhibit while it is open to receive visitors and demonstrate various points of interest, a press committee to see that the necessary newspaper publicity is obtained, a church committee to see that the exhibit is announced in the churches and to lay plans for interesting church people in controlling tuberculosis, a lodge committee to perform the same service in respect to lodges, a school committee to arrange for school children to visit the exhibit in charge of their teachers, an ushers' committee to serve at the evening meetings, and local exhibit committee to make the necessary arrangements for local exhibits.

It is important that these committees be as representative as possible and that all available social forces be brought together in their formation. Not by the board of health alone, or the board of edu-

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cation alone, or the tuberculosis society alone, or any other organization alone, can the most good be accomplished, but by the united efforts of all these agencies. The art of working together is a fine art, and a hard art for mankind to learn. Sometimes several meetings with the committee are required before things begin to move along as they should. Even then, continued supervision may be needed to direct the efforts along the most effective channels. Always there is willingness to work, and the amount of work done even under unfavorable conditions is sometimes stupendous. It would be impossible to conduct the exhibit and give it proper advertising without the assistance of the local committees. All of this work is entirely voluntary. The State thus receives much valuable service without expense. Surely this is an instance where the small outlay for organization work brings returns a hundredfold!

Local Exhibits. The need for adapting the exhibit to each community has been met by the addition of various local features.

One valuable feature is a spot map of the city showing deaths from tuberculosis for a given period—say ten years. It has been impossible to prepare such a map in most places owing to the fact that vital statistics are not registered by Boards of Health. The registrars of vital statistics seldom keep such detailed records as will furnish the necessary data for such maps. Wherever the Health Officer or Inspector of the Board of Health has been the Registrar of Vital Statistics, it has been possible to prepare a map of this kind.

Local boards of health are invited to exhibit any of their health work which they may desire to get before the public. This is urged as a means of acquainting the public with the nature of health work, and the need of more money for its proper support. Generally local boards of health do not make as much use of this opportunity as they might.

Pictures of local living conditions always attract much attention. People are interested in seeing conditions near home that they supposed existed only in far away crowded cities. Rooms with no direct opening to the outside world or "dark rooms" have been found in towns of from five to ten thousand population, much to the surprise and chagrin of the inhabitants. Dirt is found everywhere. Unclean back yards, unclean streets and alleys, unclean vacant lots, unclean living rooms, filthy outhouses, and unclean con-

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ditions generally are portrayed in these pictures. A crowd may be seen gathered around the local pictures at almost any time the exhibit is open—they are getting acquainted with their own city!

In many places the local committee has arranged contrast rooms to show the difference between sanitary and unsanitary living conditions. These two rooms, one showing good conditions and the other showing bad conditions, constitute a very impressive portion of the exhibit. Children go home and make their mothers clean house after seeing the difference brought out so strikingly by the contrast.

LECTURES. By featuring the motion picture part of the exhibit, a great deal is made of the lectures. Arrangements are always made for school children to attend in charge of their teachers during the afternoon. The hall is darkened and two or three reels of motion pictures and twenty or thirty stereopticon slides are used to illustrate a lecture given in language they can understand. At the end of an hour the children go home full of enthusiasm, transformed into the best publicity agents the exhibit can have.

While lectures to school children are very informal, the evening lectures are designed to be somewhat more dignified in character. A regular program is arranged which always includes local speakers to show that local people are behind the movement. The audience is held about one hour and a half. The first twenty to twenty-five minutes of this time is taken up in short speeches, the next thirty or forty minutes by an illustrated lecture, and the last half hour is devoted to motion pictures. For the purpose of securing the greatest possible educational returns from the use of motion pictures, a representative of the exhibit always talks about them as they are thrown upon the screen. In this way points are brought to the attention of the audience that might otherwise pass unnoticed.

DURATION OF EXHIBIT. The exhibit is kept open from three days to two weeks, depending upon the size of the city. For a town of from five to ten thousand population, three or four days is considered about the proper length of time. With a population of from ten to twenty-five thousand, the time may be extended to a week; where the population is fifty to a hundred thousand or

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more, it will usually require at least two weeks to give all the school children an opportunity to visit the exhibit, unless a very large hall is used.

Extent of Campaign. In all of the smaller cities and towns, the campaign is made to cover the municipality. Sometimes two or more municipalities join together for a mutual campaign with the exhibit in one location. In Newark the plan pursued was quite different. In co-operation with the board of education, five school centers were selected in different parts of the city and the exhibits was held in the large auditoriums of the school buildings. A week was spent in each place and the campaign was limited to the locality in which the school was situated. In that way the entire city was covered systematically. Then, the exhibit was placed in a vacant store for the benefit of people who had not seen it in the schools. While the exhibit was in the store, motion picture exhibitions were given in the playgrounds and parks. These outdoor shows attracted large crowds and proved effective in reaching many people who are difficult to reach by other means. Later in the summer motion picture exhibitions were given on the boardwalk at Asbury Park and in Ocean Park, at Long Branch. After the New Jersey State Exhibit had demonstrated the value of outdoor motion pictures in the tuberculosis campaign, the New York City Department of Health, which for several summers has used stereopticon slides in the parks, adopted the motion pictures for its park shows during the past summer.

Results of Work.

Statistical Results. During the past year, work has been done at twenty-six places in seventeen different cities and towns as follows: Salem, Princeton, Rahway, Camden, Newark (nine different places) Bound Brook, Asbury Park, Long Branch, Red Bank (two shows; one of which was at the county fair), Keyport, Freehold, Atlantic Highlands, Ridgewood, Rutherford, Englewood, Trenton (lecture only), and Hackensack. The kinds of work have been as follows: A regular campaign with the exhibit lectures in eighteen places, the exhibit only in two places, the exhibit with motion pictures at one place, motion pictures and

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slides only in three places, and lectures with motion pictures and slides in the remaining two places. One hundred and forty-three meetings have been held, four hundred and six motion pictures and five thousand seven hundred and twenty-nine slides have been shown. The total attendance at the exhibit and lectures has been 106,957.

Records show that there have been distributed in connection with the tuberculosis work 446,648 pieces of printed matter, as follows:

"How to Prevent Tuberculosis" ((English)	140,381
"How to Prevent Tuberculosis" (Italian)	9,800
Farmers' Bulletins on tuberculosis (Government Print)	1,342
Children's leaflet	3,100
Post Cards	1,100
Tages given to children	10,000
"Talking Tuberculosis" (dodgers)	28,775
Programs and dodgers advertising the exhibit	246,000
Posters advertising the exhibit	6,150
Total	446,648

EDUCATIONAL RESULTS. The most valuable results of the year's work cannot be stated in figures. They consist in changed sentiment and awakened activity on the part of the people. A few of them may be indicated by the following extracts from letters received in answer to an inquiry concerning tangible results:

"The exhibit was the most instructive lesson the town could have had."

"Much easier to get fresh air into the homes."

"There can be no question in the mind of anyone who teaches children .....as to the value of such an exhibit as yours.....I believe that the effect on a child's mind is permanent."

"There is a change in public sentiment regarding sanitation, more interest in the fly, greater demand for pure milk, etc."

"More interest and sympathy for Board of Health."

"That Tuberculosis Exhibit surely did stir up the.....people in regard to tuberculosis."

"It awakened sentiment for better ventilation and better sanitation..... More people speak favorably of a county hospital."

"Citizens have kept their premises cleaner.....Work of the Health Board is meeting with the approval of the people better this year than ever before."

"A change in public sentiment in regad to sanitation.....directly due to the exhibit.....everywhere a very much stronger sentiment against the fly."

"Unquestionably there is a greater demand for a county hospital."

"The most marked gain has been in the direction of a more intelligent public sentiment, not only on tuberculosis but on public health questions in general."

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"The concrete result to which we can most positively point at this time is the appointment, by the Board of Chosen Freeholders, of a committee to consider what kind of a hospital we should establish for this purpose."

"Your exhibit and the lectures which went with it were by far the most successful part of the campaign of popular education and to it should be credited the following:

"(1) A better understaning of real, scientific sanitation. Nuisance complaints now deal more largely with matters of real importance.

"(2) A greater demand for sanitation. The public sentiment which made possible a successful appeal for a mile of sewer extensions to be built next year.

"(3) Better support for the Board of Health. The work of forcing the connection of houses with existing sewer lines is going on more rapidly."

From the above statements, it would appear that the tuberculosis campaign leads to improvement in general sanitary and health conditions, as well as to measures for the prevention of tuberculosis. It is believed that the results of the first year's work not only indicate that it should be continued, but that it should be continued both on a broader basis and a larger scale.

Plans for the Future.

Expansion of Exhibit. The present wording of the law limits the exhibit to the subject of tuberculosis. While tuberculosis is one of the most of several preventable diseases and a campaign against tuberculosis alone is very much worth while, an additional value of such a campaign arises from the fact that the prevention of tuberculosis is but the beginning of a greater work in the prevention of other diseases as well. In fact the tuberculosis movement is only one phase of a much larger movement, looking to the general betterment of living conditions, and the securing of greater human efficiency through improvement in health. The growth of the exhibit should keep pace with the growth in thought that is bound to follow its extended use.

It will take possible two or three years yet to complete a tour of the State with the tuberculosis exhibit. When this is done it should be possible to add material on the prevention of infant mortality, the prevention of typhoid fever, the prevention of smallpox, rabies, pneumonia and other preventable diseases. It seems entirely fitting that this movement beginning as it has in the fight against tuberculosis should extend its sphere so as to combat the ravages of other preventable diseases. The work

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of the State Board of Health is not limited to tuberculosis; why should its educational endeavors be limited to this one disease? Why should not the field of its educational work be made co-extensive with the field of its other activities?

SMALL PORTABLE EXHIBITS. The entire exhibit including the motion picture booth now required weighs something like three tons. The expense of transportation is such that it would scarcely seem appropriate to attempt to show the large exhibit in a town of much less than five thousand population. There are a large number of smaller towns and rural communities to which the exhibit will not be accessible if this rule is followed. For these places a much smaller, more portable exhibit could be used.

The problem of reaching the smaller places is being worked out by the Monmouth County Branch of the State Charities Aid Association. They have constructed a small exhibit that can be carried as hand baggage. Prints of some of the best pictures in the State Exhibit were furnished them and were mounted on drawing vellum so that the whole exhibit can be rolled into a small bundle. It is likely that this exhibit will be available for use by the State Board of Health when the Monmouth County Association is through with it. The smaller communities of the State have a claim that must be respected and steps should be taken to extend the educational work for the prevention of tuberculosis to the highways and byways of the State. Already there have been requests for the loan of a small exhibit for this purpose.

SLIDES FOR LECTURES. Another means of reaching the smaller communities is through lectures. There are many opportunities for a representative of the State Board of Health to go out over the State and lecture on various health subjects. At present it is almost impossible for the tuberculosis inspector to accept invitations for lectures, because his time is so much taken up with the exhibit. Increased force to handle the exhibit would permit this work to be carried on in communities where the exhibit cannot be shown. Sets of slides with prepared lectures for loan purposes would help meet some of the present demands. It is hoped very soon time may be found to begin the preparation of such sets.

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MORE LITERATURE. It is desired to issue more publications on the subject of tuberculosis prevention as soon as their preparation can be completed. Material is often rushed to the printer in such haste that it is found to be of only mediocre quality when done. In these days of much printing, nothing designed for educational purposes should be allowed to reach the typesetter until it has undergone a most careful preparation. This requires considerable time. As soon as proper attention can be given to the matter, a special circular of instructions to patients, a circular dealing with food and a special leaflet for children will be printed.

STILL GREATER OPPORTUNITIES. The opportunity that the State Board of Health possesses for educational work is not limited to work with an exhibit. It is possible to reach a large and impressionable audience through the schools, if suitable material can be provided for such use. In fact, the Board has been invited to prepare material for use in the schools, but the invitation had to be declined because no one had time to give its preparation proper attention.

GENERAL PUBLICITY WORK. There is yet another field of tremendous importance that should not be neglected. The State Board should be in closer touch with the local boards of health, and should furnish a medium of exchange of opinion between the local boards. This can be accomplished by a monthly bulletin, which should contain matters of interest to the health officials and which should be sent to all local boards of health and others particularly interested in health work.

A great many facts concerning health conditions and disease prevention may be placed before the public through the press, if arrangements are made to prepare material for publication.

The State Board should provide a regular press service. Matters pertaining to health that have a general interest should be written up in an attractive and readable style and sent to all newspapers within the State, at regular intervals.

This work, of course, should cover a much broader field than tuberculosis, but the tuberculosis work leads naturally to the broader field. In order to accomplish the work suggested here, it will be necessary to employ a larger number of persons to carry it on. This, of course, cannot be done, unless a larger appropriation is provided.

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TABLE SHOWING SANITARY DISTRICTS IN WHICH OUTBREAKS OR CASES OF COMMUNICABLE DISEASES WERE INVESTIGATED DURING THE YEAR ENDING OCTOBER 31, 1912.

Sanitary District.	County.	Name of Disease.	Date of Investigation.
Pleasantville	Atlantic	Typhoid fever	July, 1912.
Cloister Borough	Bergen	Scarlet fever	February-March, 1912.
Ramsey Borough	"	" "	February, 1912.
Ridgefield Borough	"	Diphtheria	July, 1912.
Chester Township	Burlington	Typhoid fever	July-August, 1912.
Florence Township	"	" "	June-July-August, 1912.
Northampton Township	"	" "	Dec., 1911; Feb., 1912.
Springfield Township	"	Scarlet fever	July, 1912.
Clementon Township	Camden	Typhoid fever	September, 1912.
Collingswood Borough	"	" "	March-April, 1912.
Gloucester Township	"	" "	July-August, 1912.
Middle Township	Cape May	" "	Sept.-Oct., 1912.
Downe Township	Cumberland	" "	October, 1912.
Maurice River Township	"	" "	September, 1912.
Maurice River Township	"	" "	October, 1912.
Greenwich Township	Gloucester	" "	September, 1912.
Woodbury City	"	" "	June-July, 1912.
Flemington Borough	Hunterdon	" "	April-May, 1912.
Flemington Borough	"	Diphtheria	June, 1912.
Lebanon Township	"	Scarlet fever	July, 1912.
Hightstown Borough	Mercer	" "	January-February, 1912.
Hopewell Township	"	Typhoid fever	August, 1912.
E. Brunswick Township	Middlesex	Scarlet fever	July, 1912.
Helmetta Borough	"	Small-pox	May, 1912.
S. Brunswick Township	"	Typhoid fever	August, 1912.
Woodbridge Township	"	Diphtheria	May, 1912.
Freehold Town	Monmouth	Typhoid fever	August-October, 1912.
Middletown Township	"	" "	September, 1912.
Monmouth Beach Borough	"	" "	July, 1912.
Rumson Borough	"	" "	August-September, 1912.
Boonton Township	Morris	Scarlet fever	Dec. 1911-May, 1912.
Morristown	"	Typhoid fever	May, 1912.
Bernards Township	Somerset	Diphtheria	December, 1912.
Hillsboro Township	"	Typhoid fever	August, 1912.
Vernon Township	Sussex	Diphtheria	October, 1912.

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TABLE I.—SHOWING NUMBER AND LOCATION OF DAIRY PREMISES ON WHICH CONTAGIOUS DISEASES WERE REPORTED DURING THE YEAR ENDING OCTOBER 31, 1912.

Location of Dairies.		Diphtheria.	Scarlet fever.	Typhoid fever.	Tuberculosis.	Dysentery.	Amt. milk produced on premises daily.	Place to which milk was shipped.	Action Taken to Prevent Spread of Infection.
Sanitary District.	County.								
Englewood City	Bergen	1						Englewood	Left to local board of health.
Medford Twp.	Burlington			1			60	Phila., Pa.	
Mt. Laurel Twp.	Burlington			1				Moorestown	Sale of milk prohibited.
Springfield Twp.	Burlington		1				60	Burlington	Sale of milk prohibited.
Delaware Twp.	Camden				1		125	Collingswood	Isolation.
Voorhees Twp.	Camden			1			100	Haddonfield	Isolation.
Voorhees Twp.	Camden			1			100	Atlantic City	Isolation.
Deerfield Twp.	Cumberland		1				70	Bridgeton	Isolation.
Vineland Borough	Cumberland	1					100	Vineland	Isolation.
Bloomfield Town	Essex	1					300	Bloomfield	Left to local board of health.
S. Orange Twp.	Essex	1					400	S. Orange	Sale of milk prohibited.
W. Orange Town	Essex	1						W. Orange	Isolation.
S. Harrison Twp.	Gloucester			1			130	Camden	Isolation.
E. Amwell Twp.	Hunterdon		1					Ringoes	Left to local board of health.
Kingwood Twp.	Hunterdon	1					40	Baptisttown	Sale of milk prohibited.
Readington Twp.	Hunterdon			1			80	White House	Isolation.
Union Twp.	Hunterdon				1		25	Jutland	Sale of milk prohibited.
W. Amwell Twp.	Hunterdon	1						Trenton	Left to local board of health.
Hopewell Twp.	Mercer			1				Trenton	Isolation.
Hopewell Twp.	Mercer			1			85	Hopewell	Isolation.
S. Brunswick Twp.	Middlesex			1			40	Franklin Park	Left to local board of health.
Woodbridge Twp.	Middlesex	1					40	Iselin	Sale of milk prohibited.
Woodbridge Twp.	Middlesex	1						Woodbridge	Sale of milk prohibited.
Woodbridge Twp.	Middlesex	1						Woodbridge	
Montville Twp.	Morris	1					30	Towaco	Sale of milk prohibited.
Boxbury Twp.	Morris		1				80	Dover	Isolation.
Paterson City	Passaic			1			115	Paterson	Isolation.
Prospect Park Borough	Passaic					1	110	Paterson	Isolation.
Prospect Park Borough	Passaic			1			35	Paterson	Isolation.
Wayne Twp.								Paterson	Isolation.
Alloway Twp.	Salem						50	Phila., Pa.	Isolation.
Lower Penns Neck Twp.	Salem			1			25	Bridegton	Isolation.
Mannington Twp.	Salem		1				240	Atlantic City	Isolation.
Upper Pittsgrove Twp.	Salem			1			200	Atlantic City	Isolation.
Bridgewater Twp.	Somerset	1					200	Plainfield	Isolation.
Bridgewater Twp.	Somerset		1				200	Bound Brook	Sale of milk prohibited.
Bridgewater Twp.	Somerset				1		90	Somerville	
Franklin Twp.	Somerset		1				60	New Brunswick.	Isolation.
Hillsboro Twp.	Somerset			1			40	Manville	Left to local board of health.
Andover Twp.	Sussex	1					50	Lafayette	Left to local board of health.
Frankford Twp.	Sussex		1				80	Branchville	Isolation.
Hardyston Twp.	Sussex		1				240	Hamburg	Isolation.
Hardyston Twp.	Sussex	1					140	Hamburg	Isolation.
Montague Twp.	Sussex		1				220	Sussex	Isolation.
Vernon Twp.	Sussex		1				200	Hamburg	Isolation.
Vernon Twp.	Sussex		1				160	Hamburg	Isolation.
Vernon Twp.	Sussex	1					400	New Milford	Isolation.
Linden Twp.	Union			1				Tremley	Sale of milk prohibited.
Hardwick Twp.	Warren		1						Isolation.
		15	13	16	4	1			

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MISCELLANEOUS COMPLAINTS INVESTIGATED.

LOCATION. SANITARY DISTRICT.	COUNTY.	DATE OF INVESTIGATION.	NATURE OF COMPLAINT.	ACTION TAKEN.
East Rutherford Borough	Bergen	Oct. 16, 1912	Stable near butcher shop.	No action.
Union Township	Bergen	July 5, 1912	Surface drainage.	Referred to Local Board of Health.
Union Township	Bergen	Oct. 16, 1912	Hog-pens (unsanitary).	Referred to Local Board of Health.
Northampton Township	Burlington	Aug. 3, 1912	Foul smelling hog-pens.	Referred to Local Board of Health.
Northampton Township	Burlington	Sept. 3, 1912	House and surface drainage.	Referred to Local Board of Health.
Ocean City	Cape May	May 25, 1912	Lowlands.	Referred to Local Board of Health.
Sea Isle City	Cape May	July 10, 1912	Garbage dump.	Referred to Local Board of Health.
West Orange Town and Montclair Town	Essex	July 2, 1912	Garbage dump.	Referred to Local Board of Health.
Irvington Town	Essex	Sept. 6, 1912	Garbage dump.	Referred to Local Board of Health.
Irvington Town	Essex	Sept. 20, 1912	Foul-smelling hog-pens.	No action.
Pitman Borough	Gloucester	July 29, 1912	Garbage dump.	Referred to Local Board of Health.
West New York Town	Hudson	Aug. 26, 1912	Unsanitary conditions about bakery.	Referred to Local Board of Health.
Hightstown Borough	Mercer	Sept. 17, 1912	Mosquito-breeding pond.	Referred to Local Board of Health.
Red Bank Borough	Monmouth	July 22, 1912	Unsanitary dwellings.	No action.
Raritan Township	Monmouth	July 22, 1912	Uncovered garbage wagons.	Referred to Local Board of Health.
Englishtown Borough	Monmouth	July 29, 1912	Foul-smelling pond.	Referred to Local Board of Health.
Spring Lake Borough	Monmouth	Aug. 8, 1912	Mosquito-breeding pond.	Referred to Local Board of Health.
Ocean Township	Monmouth	Sept. 30, 1912	Garbage dumps.	Referred to Local Board of Health with advice.
Raritan Township	Monmouth	Oct. 4, 1912	Mosquito-breeding pond.	Referred to Local Board of Health with advice.
Hanover Township	Morris	April 11, 1912	Odor from undrained pond.	Referred to Local Board of Health.
Chester Township	Morris	Aug. 21, 1912	Mosquito-breeding pond.	Referred to Local Board of Health.
Netcong Borough	Morris	Sept. 23, 1912	Unsanitary privies and poor drainage.	Referred to Local Board of Health with advice.
Haledon Borough	Passaic	July 3, 1912	Refuse dumped near stream.	Referred to Local Board of Health.
Seaside Park Borough	Ocean	July 11, 1912	Dead fish on beach.	Referred to Attorney General and Local Board of Health.
Lacey Township	Ocean	Oct. 29, 1912	Surface drainage.	Referred to Local Board of Health.
Salem City	Salem	July 15, 1912	Fat rendering plant.	No action.
Hardyston Township	Sussex	July 2, 1912	Mosquito-breeding pond.	Referred to Local Board of Health.
Linden Borough	Union	July 18 1912	Unsanitary condition of dwellings.	Referred to Local Board of Health.
Washington Borough	Warren	Oct. 17, 1912	Unsanitary privies.	Referred to Local Board of Health.

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Report of the Division of Creameries and Dairies.

GEORGE W. McGUIRE, *Chief.*

To the Board of Health of the State of New Jersey:

GENTLEMEN—As Chief of the Division of Creameries and Dairies, I have the honor to submit to you the following report for the fiscal year ending October 31, 1912.

Each year marks an increase in the activities of the Division, and the importance of the results attained seems to be evidenced by the continued interest of the local health boards, the milk consuming public and the dairy interests themselves.

The action of the Legislature last year in providing funds for the appointment of one more inspector during the coming year will make it possible for us to divide the territory of the state into inspection districts, thereby enabling us to visit systematically all places where milk is produced and handled, and to classify them in such a way that we can reach the inferior ones oftener than heretofore.

The general scheme upon which the Division operates is one of co-operation with localities. Regular inspections of all dairies, creameries, etc., in the State by state inspectors would call for a very large and expensive force, and our plan has been to make inspection in given localities on requests received from local health boards or citizens of such localities, or from information received of conditions that violated our sanitary requirements.

Our plan is to divide the State into districts and to place one inspector in each, with his residence so located that he can conveniently visit the dairies and creameries within his district periodically and as often as is necessary.

In accordance with the above plan the districts will be apportioned about as follows:

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1st District, Mr. S. S. Vandruff, inspector, Sussex, N J.
Morris, Passaic, Sussex and Warren counties.
2d District, Dr. F. C. Robertson, inspector, Jersey City, N. J.
Bergen, Essex, Hudson, Somerset and Union counties.
3d District, Mr. S. S. De Cou, inspector, Trenton Junction, N. J.
Burlington, Hunterdon, Mercer, Middlesex and Monmouth counties.
4th District, Mr. Walter D. Goulding, inspector Camden, N. J.
Atlantic, Camden, Cape May, Cumberland, Gloucester, Ocean and Salem counties.

This arrangement will leave the Chief and Assistant free to assist each inspector in his work when the demands on the inspector's time prevent his visiting places that require urgent measures, and also to reinspect premises which are reported to fall below the Board's sanitary requirements.

The results of the past year's work, as shown by classified tables in other parts of this report, are very satisfactory.

DAIRY INSPECTION.

The number of dairy inspections alone exceeds that of the previous year in the following ratio:

1911	Total number of dairy inspections.....	1874
1912	" " " " "	3077

Increase, 39%.

Of the 3077 inspections made during the year, 1377 were reinspections, and 1700 were first or initial inspections. The number of dairies showing a score above sixty per cent. was less this year than last. Last year 52.4% of the inspections scored above sixty per cent. while this year only 41.5% scored above 60%. This decrease in the number of scores above 60% does not necessarily indicate that no improvement has been made in the condition of the milk supply as a whole, as 1700 dairies embraced in this year's work had never been inspected before. This means that most of them were scored low, and that other visits will have to be made to ascertain whether or not our notices to improve either the equipment or methods have been complied with.

Local boards of health have evinced greater interest in their municipal milk supplies than ever before, and most of them depend upon this Board to furnish the information they desire. In fact,

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toward the last of the year we were compelled to neglect urgent work in the investigation of creameries and ice cream factories in order to meet the requests for dairy inspection. The interest shown by local boards of health in their milk supplies can be well illustrated by a reference to the enthusiastic meetings which were held during the year by several local boards of health, and in which this department co-operated.

In November last, a communication was received from Mr. F. B. Kilmer, president of the New Brunswick board of health, in which we were informed that a meeting of some of the dairymen had been called for the evening of November 15th at Middlebush, Somerset county. A quotation from Mr. Kilmer's letter addressed to the chief of the Division will explain the object of the combined meeting of the producers who supply milk for distribution in the city of New Brunswick and the health officials whose duty it is to pass upon the hygienic quality of that product:

"The object of this meeting will be simply to meet the dairymen face to face; tell them in a rather informal way what we are after; allow them to ask questions, and where possible, promote a better understanding. At this first meeting we shall not attempt any great things. If it looks promising, we may later on get up a larger meeting, say in New Brunswick, in connection with an exhibit. Can you make it possible to attend?

This meeting was attended by forty persons who were engaged or interested in milk production and was a decided success. It was addressed by the president and health officer of the New Brunswick board of health, and by the chief of this Division, after which there was a general discussion on milk questions, in which the dairymen took a prominent part.

The success of this meeting spread among farmers in adjoining districts, and they arranged for another meeting to be held at East Millstone. This second meeting was held in December and was attended by about twenty-five producers. Addresses were made by the health officials and the dairymen entered with great interest into the discussion which followed.

These two meetings were given considerable publicity by the newspapers, and the interest in the public milk supply in Middlesex county became so great that a milk and health exhibition was suggested and was opened March 6th. A large vacant store was secured in which to hold the exhibition, and during the six days

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15,000 persons visited it. Photographs and moving pictures showing good and bad conditions in milk production were exhibited, and booths decorated with flowers and bunting were established by the most enterprising dairymen, showing the improved methods which they had adopted in the handling of their supplies. The afternoons were devoted to lectures and addresses on milk and the protection of health. The addresses on milk were made by the president, Mr. Kilmer; Mr. S. G. Williams, chairman of the New York Milk Committee, and by the chief of this Division.

Reference to these meetings is made for the purpose of showing what results the system of scoring dairies will produce. The interest which was awakened in New Brunswick regarding their milk supply was caused by the method of scoring dairies for a period of four years, and then publishing the scores for the information of milk consumers. These scores were keenly discussed by the general public and had the very effect which was sought by the health authorities of stimulating among the farmers a rivalry for high scores.

Other similar meetings have been held in the state, and the results have in every case well re-paid the efforts of those who managed them, by obtaining for the communities a higher grade of milk. The present milk supplies of the borough of Collingswood, Camden county, and of Princeton, Mercer county, and of the city of Jersey City, are conspicuous examples of the stimulus of publicity.

The milk supply of Princeton is derived from thirty-five dairies and the State inspectors have been annually scoring these dairies since 1908. The scores were first published last year and the milk of four dairies which, after repeated inspections, failed to meet the sanitary requirements, was excluded from the supply. During the past year the dairymen supplying Princeton with milk have held meetings and conferences with the health authorities, and a scheme now in operation awards prizes to producers having low bacterial counts. The dairy scores in this locality have heretofore been published in the local weekly paper, but the results of the coming dairy inspections will be published on bulletins which will be posted in store windows, the public library and the public schools. The prizes consist of $15, $10 and a silver loving cup, this last prize to be given to the milk dealer who has the highest standing for the year. Dairy

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score, bacterial analyses, and the richness of the milk enter into the scheme for rating the milk supplies.

The following is a copy of a circular letter which has been sent to every dealer supplying milk to Princeton, informing him of the health board's purposes regarding the proposed temperature ordinance:

PRINCETON, N. J., Nov. 12, 1912.

DEAR SIR—The Board of Health of the borough of Princeton has passed ordinances on their first reading which require the cooling of milk to 50° Fahrenheit. This will require the use of ice at the dairy and on the wagon. A hearing will be given to all milk dealers and dairymen on these proposed ordinances at the Council Chamber in the brick building on Nassau Street at the Corner of University Place on Monday evening, November 18th, at eight p. m. Please come if possible.

A silver cup (now on view in Briner's drug store window) will be awarded to the milk dealer who has the best showing for the year. Dairy score, bacterial analysis and richness of the milk will all count. I trust you may receive a *high score* this fall and suggest that white-wash be applied, the cow yard and stable be kept clean, and if possible, that the cows be tested both physically and by tuberculin. These last two examinations of the health of the cows add eight points to the dairy score, and will make it possible for you to win the cup if you cool your milk, and keep it clean enough to have a low number of bacteria.

Very truly,
ROBERT N. HOYT,
Health Officer.

You last analysis was.....bacteria and.....% butter fat.

After the first scoring takes place in certain localities, it is frequently found that those dairymen who have scored low manifest considerable dissatisfaction and seek other markets which are less particular as to quality. However, as soon as a given locality learns that it is a depository for the rejected milk of districts where the principles of hygiene are more strictly enforced, the State Board soon receives an appeal for an investigation into the milk supply, the residents or health authorities of that locality deciding that they do not want milk which is not good enough for other towns.

The following letter will illustrate a situation which we are constantly facing, and will continue to face until every dairy in the State is required to produce a milk that is clean and fit for human consumption:

Board of Health of the State of New Jersey, Trenton, N. J.

GENTLEMEN—Referring to the correspondence passing between us regarding the milk ordinance recently placed in effect in our city, now that we have commenced to enforce its regulations, backed up by the inspections of the

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dairies made by your force, we find the local milkmen are somewhat disinclined to urge their dairymen to make the improvements required by your inspectors, for the fear that by so doing the dairymen will cut off their supply of milk.

We have also learned of instances where the producers have refused to ship the milk dealers any more milk, while others send their milk to communities where there is no milk ordinance in effect. In other instances, a milk dealer who draws his supply from several different sources, advises us that he is sending into our city milk from dairies that have passed the minimum mark, while the other that he receives from the dairies whose mark is below the minimum score, they divert to other places.

The local milk dealers are complaining that they cannot get their proper supply of milk from the dairies, as the dairymen do not want to make the improvements. The report comes to us from the producers that, if we are not satisfied with the conditions, they can find a ready sale for their product in nearby towns who have no such provision in effect.

We are bringing these facts to your notice, and ask if you cannot aid us by securing other towns close by to co-operate with our city. The local Board of Health does not wish to work any hardship on the citizens of this city, and at the same time we feel obligated to take every sanitary precaution possible, and you will at once see that unless the surrounding towns also cooperate, or the majority of them, we will become isolated, while on the other hand, if you could take the matter up with them, so as to have uniform regulations in effect, the dairymen will, of necessity, be required to come up to the standard.

Under these circumstances, we ask if the Board of Health of the State of New Jersey will not give this their consideration, and take the matter up with the boards of health of adjacent towns in an effort to have them adopt similar regulations, thereby affording the same protection to all, or, can you devise or recommend some means whereby the facts we have set forth, may be satisfactorily adjusted for the benefit of all.

During the spring of this year we were asked by a New Jersey milk dealer to inspect ninety-one dairies supplying his creameries. Part of the mixed milk from these creameries was shipped to New York city, and the board of health of that city sent inspectors to score all the dairies, and finally threatened to exclude the milk produced on them unless certain recommendations were carried out, and new and permanent methods established in the management of the dairies. The dairymen whose milk was under the ban of the New York authorities sought other creameries for a market for their milk, and the creamery owner in question, fearing that he would lose a large quantity of milk, appealed to this Board for a further inspection of all the dairies in the districts adjacent to his creameries.

An interview was immediately arranged between the Chief of this Division and the officers in charge of the New York Milk Bureau, and an agreement was made whereby action by them would be deferred until the dairies in question were scored by our officers. The inspections were begun in April and continued until two hundred

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and fifty-seven dairies were scored. The scores ranged from 26.5% to 72.00%. The minimum requirement of this Board is 60%. Letters were written to all those farmers whose premises fell below our requirement, urging them to improve their methods in handling milk, and the creamery owners were asked to co-operate with us in securing these betterments. The first inspection showed the following results:

Creamery	No. 1	No. of	Patrons,	70	Average	score,	55.00%
"	No. 2	"	"	42	"	"	59.52%
"	No. 3	"	"	43	"	"	59.25%
"	No. 4	"	"	50	"	"	57.50%
"	No. 5	"	"	52	"	"	51.75%

A re-inspection of the dairies supplying the three creameries that shipped part of their product to New York showed improved conditions sufficient to raise the average score as follows:

Creamery	No. 1	from 55.00%	to 59.00%
"	No. 2	from 59.25%	to 61.50%
"	No. 3	from 57.50%	to 62.00%

In all these three hundred and forty-six inspections, which include the re-inspections, it was necessary to exclude the milk of only one dairy from general distribution.

During the month of February, we were requested by the board of health of Jersey City to make an inspection of the dairies located within the city limits, with a view to eliminating those found to be unsanitary. The same work had been undertaken many times in years past, and although extreme insanitary conditions were found, no action by the local authorities was ever taken. The State Board of Health brought several suits on those occasions. Fines were imposed in some cases, and in others, for some mysterious reason, the juries failed to convict. These experiences covered a number of years, and we had come to look upon the possibility of abolishing these pest-spots as hopeless until an indignant public opinion should become so thoroughly aroused to these deadly conditions, which menaced the lives of the innocent babies who were being fed a milk laden with impurities from filth and manure. We entered again upon the work this year only after we had obtained assurance of the hearty co-operation of the local board. During the investigation, the members of the board, under the presidency of Dr. H. H. Brink-

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erhoff, visited the dairies in person. Through their efforts the members of the Women's Afternoon Club and the Mayor of the city became deeply interested in the crusade, and finally the newspapers devoted considerable space daily to exposing the conditions which were unearthed.

Representatives of the local board and a committee of the Women's Afternoon Club visited some of the worst dairies and saw for themselves milk drawn from diseased cows; water drawn from wells in close proximity to privy vaults and used for cleaning milk bottles and pails; feathers from fowls and filth from families where milk was strained and prepared for market; milch cows pastured upon garbage heaps on the banks of an open sewer and wallowing in sewage; milk bottles kept in chicken coops and milk cans dried upon chicken coop palings with the interior exposed to germs and vermin, and manure barrels kept in the cow pens where cows are milked. These revolting sights brought forth the remark from a medical member of the board that "it was no wonder that twenty-five per cent. of the babies of Jersey City died in infancy."

Included in the twenty-eight dairies inspected there were 343 cows producing a total of 4,000 quarts of milk a day. The scores of all the dairies were sent to the local board of health with comments upon the condition of the premises and the methods of handling milk. The usual practice of this Board is to furnish the dairymen with a copy of the score made of his dairy, with such recommendations for improvement as seem warranted in the circumstances. It was not thought wise in these cases, however, to furnish the dairymen with copies of the scores or to make any recommendations in the way of improvement, since the keeping of from ten to twenty-five cows on an ordinary city lot in a congested section can scarcely result in anything but a nuisance. At a meeting of the local board of health on March 19th, however, when the chief of this Division submitted his report, we were requested to send the dairymen copies of their scores with any comments on the conditions that we thought proper. At that meeting the owners were given an option until May 1st to meet the requirements of the Board or to go out of the business. This Board was also asked to make a reinspection before May 1st, and to report what improvement, if any, had been made. This was done, and the following is a copy of the letter sent to the owner of each dairy scored:

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BOARD OF HEALTH OF THE STATE OF NEW JERSEY, TRENTON, N. J.

DEAR SIR—Pursuant to a request of the Jersey City Board of Health, I am sending you herewith a copy of a score-card showing the sanitary condition of your dairy premises on March 5th, 1912. This score-card embraces 70 items, each one of which has a bearing on the hygienic conditions of the milk produced on your dairy. It is the practice of the State Board of Health not to approve of any dairy which falls below 60% of a possible 100 points on the score-card of the Board. This does not mean, however, that if you attain this minimum requirement that your dairy will necessarily be approved. Your dairy may score much higher and yet not be approved on account of defective sanitation in some particular.

In order that you may fully understand and be prepared for whatever future action may be taken by health authorities regarding the continuance of your dairy, I desire to state that unless there are radical changes made in the conduct of your establishment, this Board will advise the abolition of your dairy.

We do not think it is possible to produce wholesome milk in city dairies, where there is no opportunity for the regular outdoor exercise of the cattle, where adequate washing and sterilizing facilities for cans and utensils are not provided, and where no special milk house is provided for the bottling, storing and preparing of milk for distribution; and we therefore desire to inform you that unless the above-named safe-guards are provided on or before May 1st, we shall advise the Board of Health of Jersey City to prevent the further production of milk for market purposes in the establishment conducted by you.

Respectfully yours,
Chief of the Division of Creameries and Dairies.

In the meantime, public opinion had been aroused by the newspaper comments and the worst of the places had been visited by members of the Jersey City board and others. At the May meeting to which the dairymen were summoned, all but three owners were informed that the board would not countenance the continuance of these places any longer, and a resolution was at once adopted to abolish them. The owners of the three best dairies were given one year in which to discontinue the business within the city limits. At the end of the time limit given the dairymen to close out their business, it was found that five were still producing milk for sale, and the local board entered complaints against them, charging them with keeping cows within the city limits without having obtained a permit, and for keeping the same in a crowded and unhealthy condition. The defendants were found guilty on both charges and fined $20.00 each. These fines were afterward remitted when it was found that they had disposed of their animals and closed their dairies.

With the elimination of these dairies from Jersey City, the supply which is now received is equal to that of any other city in the State, because it is principally produced in Orange and other New York state dairy counties, and in Warren and Sussex counties in this

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State, which have been under the supervision of both New York and New Jersey inspectors for several years.

Other cities, especially in the upper sections of the State, are waking up to the fact that they have too long tolerated places on which milk is produced for public use, the yield from which is inimical to the health of the consumer. During the year we received a number of complaints from these localities, and we took action either to compel better conditions or to abolish the dairies. It often happens, however, that after action has been taken by the board, the same places are later operated under the same conditions, and unless the local boards require a permit to be taken out and insist upon the clean methods provided for in their sanitary codes, no permanent improvement can be effected.

With a view to ascertaining the degree of activity with which local boards had co-operated with us during the year, the following letter was sent to twenty municipalities to whom we had previously sent some communication regarding their milk supplies:

Board of Health of.....

GENTLEMEN—During the past year officers of this Division have made an inspection of all the dairies supplying.....with milk. Some of these dairies scored very low, and we would like to ask whether or not any action was taken by your board against the sale of the milk within your jurisdiction. We desire this information so that we can show the activity of each local board with whom we have co-operated during the past year.

Thanking you in advance for any information along this line, I beg to remain,

Very truly yours,
Chief of the Division of Creameries and Dairies.

In response to the above, we received replies from nearly all of the health officers written to, and below will be found copies of some of them, showing the interest which is manifested, and the results which they are obtaining:

BOARD OF HEALTH OF THE VILLAGE OF SOUTH ORANGE, N. J.

Board of Health of the State of New Jersey:

GENTLEMEN—Yours of October 29th in *re* any action of this board on dairies with low score is at hand. We have found it a matter of policy to encourage the dairymen to make improvements. However, I now feel that persuasion has been giving too much trouble, and will not recommend license to any milkman whose sources of supply are not at least up to score of 60%. For year 1913 this board will not license any milkman who has not adequate means of sterilizing bottles. We expect to sample bottles as a check on sterilization.

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We expect to ask you to inspect every dairy in our supply in December next. All licenses expire December 31st.

Very truly yours,
A. C. BENEDICT,
Health Officer.

COLLINGSWOOD BOARD OF HEALTH.

State Board of Health:

GENTLEMEN—In reply to your letter to C. C. Powell, secretary, would state that our board has by ordinances prohibited the sale of milk below point of 60%. Also compel the installation of a proper sterilization plant and distribution of milk only in bottles. We are getting good results as shown by the higher percentage of milk supplied.

Yours truly,
EDWARD S. SHELDON, M.D.,
Dairy Inspector.

BOARD OF HEALTH OF ELIZABETH.

New Jersey State Board of Health:

GENTLEMEN—In reply to yours of the 30th ult., regarding inspection of some of the dairies supplying Elizabeth with milk would say that we have eliminated all those in the county and in the city having low scores and hope to be in a position to extend this work, with your co-operation, into the entire milk shed of Elizabeth, next year.

In August a bacteriologist was appointed by the Board, who is making daily chemical tests and bacterial examinations of our milk, analyzing between 250 and 300 samples each month.

On October 15th an inspector was put on temporarily to bring in the milk samples and to look over the dairies. This appointment has not been made permanent, which I trust can be done at an early date.

At a meeting of the board held Thursday, November 14th, a milk ordinance was adopted on its first and second reading in which a minimum score of 60% is required.

In conclusion would state that we hope to be in a position to prosecute the supervision of our milk supply the coming season with thoroughness.

Very truly yours,
L. J. RICHARDS,
Health Officer.

BOARD OF HEALTH, ASBURY PARK, N. J.

Board of Health of the State of New Jersey:

GENTLEMEN—Your communication of October 29th was received. In reply will state we have ordered each dealer to discontinue the sale of milk when information was received from you that he had failed to score sixty points. We think if it is possible, it would be a good plan to have more frequent inspections each year, one in each season. It would assist us greatly in improving the milk supply in this city. Can you give us this additional inspection?

Yours very truly,
B. H. OBERT,
Secretary.

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DEPARTMENT OF PUBLIC HEALTH, NEWARK, N. J.

New Jersey State Board of Health:

GENTLEMEN—Your letter of the 29th inst. received and in reply would say that we have reinspected all the dairies in our suburbs supplying us with milk several times, and that there has been almost 50% improvement since your Board scored them. In every case where you recommended stopping the sale of milk, we did so and caused these farmers, with one exception, to fix their barns up in good shape. We have also stopped the sale of milk from two other dealers.

Hoping that this is the information you desired, and asssuring you that we will be glad to give you more at any time, I remain,

Respectfully yours,
DAVID D. CHANDLER,
Health Officer.

DOVER BOARD OF HEALTH.

Board of Health of the State of N. J.:

GENTLEMEN—Your letter to Mr. Tonking, secretary, was given me for reply. There is no milk sold in Dover from dairies under 60%. In fact, I think our last inspection of dairies showed them all above 60%, except four. These I understand have come up to the score since. We have sworn statements from creamerymen that they will send no milk to Dover scoring under sixty per cent.

We are now passing an ordinance compelling all milk vendors to bottle milk, and as soon as we have them printed, which will be Friday of this week, shall send you a copy. We should like another inspection of dairies as soon as cows are stabled, and it is our intention to try to shut out creameries who receive milk from dairies under 60%. We shall certainly stop any dairyman who scores under that mark. After May 1st, 1913, we shall compel dealers to keep milk below 50°F. if they have to ice it, which I think they will certainly have to do. We are continually after the milkmen, but it takes some little time to work this matter up without court proceeding. It is my honest opinion that next summer will find us in better shape on the milk question than ever before.

Yours truly,
JOHN G. TAYLOR,
Health Officer.

MADISON BOARD OF HEALTH.

State Board of Health, Trenton, N. J.:

GENTLEMEN—Replying to your letter of October 29th would say that two dairymen, whose premises had a rating of 43.25% and 49.50% resspectively, were refused a permit to sell milk on January 1, 1912, and have gone out of business.

Yours truly,
S. FRED BURNET,
Health Insp.

The city of Trenton, having changed its form of government, placed the supervision of the milk supply with the director of public safety. After the Commission was well organized, application was

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made to the State Board for an investigation of each source of the city's milk supply. A milk inspector was appointed, and he accompanied our officer on his tour of inspection. In all, six hundred and eighty-one dairies were visited, and the result of the work will be found in another part of this report.

The inspection of these six hundred and eighty-one dairies developed some interesting observations with respect to the attitude of the owners toward a clean milk supply, and the character of the milk shipped to this city. The dairies supplying Trenton and other central and southern parts of the state, where systematic inspection has not been followed heretofore, may be classed in four groups:

Group No. 1 represents about five per cent. of the total number, and consists of dairies of the best type, where thorough, up-to-date methods are followed; where the cattle are kept in well lighted and well-aired stables, with tight floors and manure gutters; where the dairymen make the production of milk their sole business, and the farming is done principally for the feeding of the cattle.

Group No. 2 consists of what may be called good dairies; they belong to farmers of the better type, where the stables, although old-fashioned, are clean, and the methods of the dairymen are of of the best. These dairies supply a good quality of milk, and represent about 25% of the total number.

Group No. 3, which supplies the bulk of the milk of large municipalities, or about sixty per cent. of the whole, are owned by men who do not depend on their dairies for their income, except as connected with other farming operations; the stables are, as a rule, of the old type, with box stalls or stanchions, with or without manure gutters; they are cleaned on an average of only once a day; they are seldom white-washed; they have not sufficient windows to enable the men to perform their work properly, and there is no consideration for the health and comfort of the cows. The men come from the field and proceed to milk without washing their hands or making other preparations. The milk may be stored in horse troughs or in tubs of water near the stable or barnyard.

Group No. 4, of 10% of the whole, consists of those belonging to the careless dairymen, and are of a bad type; they have either old stables or hovels, with no convenience for the work. The stables are cleaned only when time allows; manure is thrown just outside the stable door, where cows are compelled to wade through

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the filth in entering or leaving the stable. The milk is stored in a shed or kitchen, or in the yard where frequently the family washing is done, where men sit and smoke, and any filth that may be near can contaminate the milk.

The great trouble with the general supply is that the milkmen buy promiscuously from these different types of dairies. The milk is all poured together at the depot, and the dirt of the worst is mixed with the better grade. No matter how careful the dealer may be under such circumstances, each customer gets his share of the dirty milk.

It is to the two last groups of dairies, where there is an entire absence of sanitary care, that the time of the inspector is most largely devoted. Where an inspection of the whole supply of any municipality is undertaken and all of the dairies are classified by giving them a numerical rating, our efforts are first of an educational nature, and failing to impress the owner by instructions and persuasion, legal steps are then taken to prevent the sale of milk which is considered unwholesome.

For example, the borough of Princeton obtains its supply from thirty-five dairies which have been regularly inspected since 1908, and the increase in the score, as shown below, is 16.25%.

The yearly average score in these localities has been as follows:

Town	*Year.*	*Score.*	*Year.*	*Score.*
Princeton	1908	56.00%	1912	72.25%
Burlington	1909	55.00%	1912	60.00%
Bound Brook	1907	52.50%	1911	60.50%
Perth Amboy	1911	59.50%	1912	66.25%
Bordentown	1907	56.50%	1912	65.00%

A dairy in Roselle, upon the first inspection, scored but 29.50%. The cows were kept in a filthy condition. The milkers' hands were unwashed, and the milk was exposed in a dirty yard pending delivery. Utensils were carelessly washed in water drawn from a polluted well, and in fact the dairy presented a most repugnant aspect. The owner, a foreigner, was informed that he could not continue the milk business under the existing conditions, and he begged for instructions as to how he should improve them so as to meet our requirements. The information was given him with little thought that he would really comply, but when he applied for a reinspection in less than one month's time, his dairy scored 62 points, and the

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renovation which had taken place was found to be most remarkable. Subsequent inspections brought his score up to 84 points, and he has been maintaining this record since 1909.

During the past year we have inspected seventy-seven city milk distributing plants at the request of the local authorities. We have stated before that this work should be performed by the local health officer or his assistants. Since the residents of each locality are so vitally interested in their home supplies, each municipality should have an ordinance designed to regulate all places within their respective jurisdictions where milk is handled for sale. The inspection of dairies is not more important than the inspection of city milk plants; in fact, during the past year several outbreaks of contagious diseases have occurred which have been due to washing bottles collected from infected houses in the same vessel and water in which all other bottles and utensils were washed. Several boards have realized the possibility of serious results from unregulated milk depots, and have passed ordinances governing them.

The following is a copy of the proposed Orange code, which may perhaps serve as a guide for other boards contemplating the same procedure:

BOARD OF HEALTH OF THE CITY OF ORANGE.

RULES FOR MILK BOTTLING ESTABLISHMENTS.

The term "milk bottling establishment" or "establishment" as hereinafter used, shall be held to include every building or part of a building, in which milk is bottled for sale or distribution in the city of Orange, wherever located. The term "bottling room" shall be held to apply to any room or part of a building, in which milk is exposed or bottled, and the term "washing room" to any room, or part of a building, in which any containers, apparatus or utensils, used in the handling of milk, are cleansed or otherwise treated. The following rules shall apply to all such milk bottling establishments; and no milk which has been bottled, handled, or stored in non-compliance with or in violation of any said rules, shall be sold, held or offered for sale or delivered in the city of Orange, under penalty of twenty-five dollars for each and every offense.

1. No such establishment shall be located within 100 feet of any hog-pen, manure pile, privy vault, or other source of contamination.

2. Water supply used for washing bottles and utensils shall be obtained from a source subject to the approval of this Board.

3. Every privy vault located on any premises where milk is bottled, shall be so constructed that the contents shall be inaccessible to flies, and every such privy vault shall be kept at all times in a sanitary condition.

4. Bottling and washing rooms shall conform to the following requirements:

(a) Floors to be water-tight, constructed of cement, concrete, or other non-absorbent material, and properly drained to a point or points at which drainage is disposed of.

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(b) Walls and ceiling to be smooth and kept well painted or lime-washed.
(c) Adequate natural light to be provided.
(d) Adequate ventilation to be provided.
(e) Rooms to be thoroughly screened against flies from first of April to the thirty-first of October.

5. Drainage shall not be permitted to flow into or upon the ground underneath the establishment or within 100 feet of the same. If drainage is collected in a cesspool or other receptacle, the same shall be water tight and shall be kept in a sanitary condition.

6. Non-employees shall be excluded at all times from bottling and washing rooms.

7. Milk on reaching the establishment shall be cooled to a temperature not exceeding 50°F. (if such cooling has not already taken place), and shall be thereafter maintained at such a temperature. Cooling tanks shall be constructed of smooth, water-tight non-absorbent material, and the water in such tanks shall be changed at least once a day during the months of May, June, July, August, September and at least twice a week during the remainder of the year.

8. That all milk bottling establishments shall be fully equipped with appliances for thoroughly cleaning all containers and utensils used in handling milk, and such equipment must be approved by the board of health of Orange.

9. Adequate lavatory facilities for employees shall be provided, separate and distinct from apparatus used for handling of milk or treatment of milk utensils. All employees engaged in bottling and washing rooms shall, before beginning work and after visiting the toilet, wash their hands thoroughly with clean water and soap.

10. No bottling or washing room shall be used as a living or sleeping room or be directly connected with such room or be used for any other purpose than the storage or handling of milk and milk utensils.

11. No person affected with typhoid fever, dysentery, scarlet fever, diphtheria, or tuberculosis, shall be employed in any milk bottling establishment; nor shall any member of the family of any such person be so employed; unless by permission of this board.

12. All milk utensils and apparatus shall be of such construction as to be readily cleansed and shall be kept in good repair and free from rust.

13. Bottle caps shall be kept in a clean dust-proof container.

14. Bottling and washing rooms and all parts thereof shall be kept clean, and free from offensive odors. Dirt, dust, rubbish, clothing, all articles not used in the handling of milk, and domestic animals shall not be permitted in such rooms.

15. Clean aprons or suits used for no other purpose shall be worn by employees in bottling and washing rooms while in performance of their duties.

16. No spitting or smoking shall be permitted in bottling and washing rooms.

17. No milk shall be bottled except in an establishment in which all of the foregoing regulations are complied with, and at no time and in no place shall milk be exposed to contamination by dust, dirt, flies, communicable disease, or other act or thing injurious to health.

CERTIFIED MILK.

Certified milk may best be defined by a quotation from a bulletin issued by the Public Health and Marine Hospital Service of the

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United States on the "Methods and Standards for the Production and Distribution of Certified Milk," as adopted by the American Association of Medical Milk Commissions, May 1, 1912:

Certified milk is the product of dairies operated in accordance with accepted rules and regulations formulated by authorized medical milk commissions to insure its purity and adaptability for infants and invalids.

The need for such a milk was experienced primarily by those engaged in the conservation of life and health of infants. As a result there was formulated in 1892 a plan whereby certified milk would be produced by a dairyman under the control of a medical milk commission designated by a representative medical society.

The first rules designed for this purpose were those contained in an agreement entered into by a medical milk commission and the dairymen concerned.

The rules contained in the original agreement mentioned represented the essential requirements for the production of certified milk. Following this precedent, other commissions were organized, which, in 1906, became federated into a national association known as the American Association of Medical Milk Commissions.

A fundamental object of this association was to bring about the uniformity of standards and their perfection. This result has been reached by the adoption from time to time of definite standards relating to the veterinary inspection of herds and farms, the medical inspection of employees handling the milk, and the bacteriological and chemical examinations as to quality and purity. The requirements with respect to these four topics have been previously reported upon by committees and adopted by the association, and at its last annual meeting provision was made for their further revision and amplification.

By the foregoing it can be seen that certified milk has a definite meaning, and that when it is properly certified, physicians can recommend it to their patients as representing the best standards of quality, purity and safety.

No milk can be called "certified" unless a medical milk commission issues a certificate to the dairyman producing it, after the fulfillment of all the requirements of the contract entered into by the dairyman and the commission. These requirements are based upon certain distinct lines of control, and regular investigations are made by committees appointed by the commission as to the conduct of each dairy under contract. Two members of each committee are expected to visit the dairy not less frequently than once a month, after which they must fill out an inspection blank, sign it and send it to the secretary of the commission.

The lines of investigation provided for in the contract are classified as follows in the rules of the various commissions:

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1. COMMITTEE ON DAIRY HYGIENE. Supervises the collection, handling and transportation of the milk.
   Milking—Preparation of the men, the cows and the surroundings. Sterilization of machinery, utensils and containers. Bottle sealing. Refrigeration. Transportation. Distribution.

2. COMMITTEE ON VETERINARY INSPECTION. Supervises the cattle, their feeding, housing, hygiene and health.
   Cattle—Breed. Health of cattle. Veterinary supervision. Tuberculin-testing. Housing of cattle. Cleanliness and drainage. Feeding and fodder. Building and construction of barns.

3. COMMITTEE ON MEDICAL SUPERVISION AND EMPLOYEES. Supervises the selection of employees, health and personal hygiene.
   Employees—Health. Sanitation. Sleeping quarters. Food. Personal cleanliness. Physical examination for disease and disease carriers. Care of hands and uniforms.

4. COMMITTEE ON CHEMICAL AND BACTERIOLOGICAL EXAMINATIONS AND STANDARDS. Supervises the manner and methods of chemical and bacteriological examinations of the milk, the collection of the milk for examination, standards of quality, purity, safety, water supply.

Chapter 237 of the laws of 1909 was designed to compel observance of the rules adopted by the National Association of Medical Milk Commissions, in addition to which it provides: "that all containers of certified milk shall have attached thereto or placed thereon a certificate or seal bearing the name of the medical milk commission with which such dairyman producing such milk shall be under contract, which certificate shall have printed, stamped or written thereon the day or date of production of the milk contained in any such container, and the words 'Certified Milk' in plain and legible form."

It came to the attention of the Board this year that milk was being sold in this state as certified which did not meet the requirements of the above law and an investigation of the complaint is now being made. We learned that the covers used on the bottles by a number of these dairies did not bear the day or date of production, and since proof of the freshness of the milk is one of the essentials of the certified grade, this was thought by the Board to be a clear violation of the law. A circular letter was sent to all producers calling their attention to this infraction of the law, and a number of them responded at once and sent us copies of new caps absolutely in compliance with the act, while a few others made no response whatever to our letter and still continue to use the old style caps.

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The State Board sent a communication to the Attorney-General asking for his opinion as to the Board's duty in the premises, and his reply was in part as follows:

"There can be little doubt but that the Legislature intended that the time of the production of the milk should be stamped upon the seal and that this intention would not be complied with by merely stamping upon the seal the day of the week upon which the milk was produced, although such stamping might be said to be a strict compliance with the provisions of the act. It does not appear anywhere in the act, however, that the Board of Health are charged with the enforcement of its provisions and no penalty appears to be fixed in this act for a violation of the provisions of section nine. It is my opinion, therefore, that the Board of Health cannot compel dealers in this kind of certified milk to comply with this section."

It was the intention of the framers of the act to have its enforcement placed in the hands of the State Board of Health, and it is suggested that a bill to correct this inadvertance be recommended to the Legislature at its next session.

In the influence which it has had on ordinary milk, certified milk has accomplished more than its founders expected. These plants have been object lessons to the dairymen of the State, and the careful methods and perfect equipment maintained in them have been copied to a less degree on many other farms. For this reason, no loophole should be allowed that will permit milk to be sold under the name of "certified milk", which does not measure up to all the requirements of medical milk commissions. The only way this can be done, as before stated, is to give authority to the State Board of Health to enforce the act and to provide a penalty for its violation.

CREAMERY INSPECTION.

As noted elsewhere in this report, the unprecedented demand upon our time for the inspection of dairy premises prevented us from giving sufficient time to creamery inspection, and the result became very apparent when we were finally able to visit some of the creameries which had been of necessity neglected.

We found that some managers had become careless in handling milk. The walls and ceilings of their establishments had become dirty, and the apparatus and milk pipes in many instances were found to have been imperfectly, if not rarely, cleaned. When we

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discovered this condition of affairs, our whole force was detailed to make a tour of the creameries. Several warning notices were sent out and one suit instituted for a violation of the creamery act.

There were in the state at the end of the year 175 creameries or places where milk is received and handled for wholesale distribution. Some of these are merely milk stations that receive and ship milk in cans without handling it in any other way. In most of them, however, the milk is exposed to the air of the place, is manipulated in separators, pasteurizing machines, etc., and bottled for city distribution. It is highly important that these places shall be regularly inspected, and with our one additional inspector for next year, we hope to keep them all under better supervision.

An important matter claiming our attention this year was the structural changes in creamery plants and the building of new ones. Alterations are frequently necessary in these plants because of unsatisfactory milk handling arrangements or unusual growth of the business. The provision for as much extra space as possible for the conduct of the business is praise-worthy on the part of the operator, but he makes the mistake of completing the changes before the officers of this Board have an opportunity to inspect the plans. In his desire to provide more convenient facilities, he often overlooks features that are essential to insure the safe handling of the milk while it is in his charge. The result is that he must change his plans in order to meet the requirements of the Board, and becomes handicapped by loss of time, extra expense and other annoyances, which would not have occurred had he submitted his plans to this Board for approval. The same may be said of the building of new creameries. They are frequently built and ready for the reception of milk before application is made to the Board for a license, and in a great many instances the arrangement of the rooms is entirely at variance with our requirements. It is hoped that in the future all operators building new plants or making extensive alterations in their present establishments, will submit plans to this office before going ahead with the work.

In fifty creameries of the State, pasteurizing machines of one sort or another are used. While pasteurization of milk does not by any means secure the true standard of quality desired in market milk, yet, if carefully done, it is a safe-guard against the transmission of disease by the possible presence of pathogenic organisms in raw

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milk. The trouble is that in most plants, the system is used solely as a means of preserving milk for a longer time than it would otherwise keep, and improvement in its hygienic quality is not considered. Of the fifty creameries in which pasteurizing machines have been installed, only eleven are equipped with retarders or holding devices for retaining the milk at a temperature sufficient to destroy disease-bearing germs.

Thirty-seven machines now in operation have no holders and the milk passes through the machines too rapidly and at uncertain temperatures.

Competent authorities have suggested a sliding scale regulating the time and temperature for holding milk in pasteurizing machines so as to get the most efficient results, as follows:

158 degrees F. for at least 3 minutes.
155 degrees F. for at least 5 minutes.
152 degrees F. for at least 10 minutes.
148 degrees F. for at least 15 minutes.
145 degrees F. for at least 18 minutes.
140 degrees F. for at least 20 minutes.

Milk for pasteurization should be limited to that produced in dairies which are frequently inspected and which maintain a high score. To obtain the best results, milk should be cooled to a temperature of 50 degrees F. immediately after milking, and kept at that temperature both before and after pasteurization, and until delivered to the consumer.

ICE CREAM FACTORY INSPECTION.

At the end of the fiscal year there were 462 establishments in the State where ice cream is manufactured, as against 415 reported last year. We have endeavored to visit each one of these places at least once during the year, but as our force is inadequate to give them all the attention which they should receive in order to prevent the owners from again growing indifferent to unsanitary conditions, we have chiefly confined our efforts to the inspection of those factories in which licenses were requested or which were known to be operated in violation of the rules of the Board.

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The rules which the Board adopted last year for the government of ice cream factories have been printed and copies given to each inspector to post in the factories.

In one factory, it was reported that nearly every rule was violated and the Board caused the license to be revoked. The inspection of this place was made in July, and it was found that the doors and windows were unscreened and the room was swarming with flies. Both the light and ventilation were poor, and a strong odor of decomposed milk was present. The washing facilities were inadequate and there was no proper cooling box for raw milk and cream The apparatus was unclean and the finished product was unprotected from dirt. The above is but an illustration of the conditions which are found in many of them on the first inspection, but usually when the owners learn that they must obtain a license to continue the business, they as a rule try to meet our requirements, and a second inspection always shows great improvement.

There still remains over two hundred ice cream factories unlicensed. Some of them have made the necessary improvements in their methods or equipment and are waiting for re-inspections, while others have not yet come up to our requirements.

The operation of this comparatively large number of un-licensed factories is permitted chiefly because of our practice not to recommend a license until there has been a full compliance with the rules. Where an honest effort is being made to meet the requirements of the Board, time is given in which to complete the necessary improvements.

In many drug stores, a small quantity of ice cream is manufactured for use at the soda fountain. The out-put is so small that the proprietors do not think it necessary or do not have the space to provide a suitable place for its manufacture, such as the law requires and often the merest makeshifts are used to give it the appearance of a respectable factory. The utensils are usually imperfectly washed by the attendant in the prescription room of the drugstore. We would here naturally look for the best methods on account of the intelligence of the average proprietor.

Other ice cream factories are those of small operators and street vendors. These are usually foreigners who have recently arrived in the country, and their factories are located in cellars or in rear rooms of ice cream stores. The equipment is very primitive, and the oper-

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ator peddles the ice cream from a push-cart, usually taking his stand near the public schools or parks where large numbers of children congregate. The members of his family are often in and about the store and factory, while the premises as a rule are dirty. A small gas or oil stove is generally used to heat water for washing purposes, and after the first article is washed, the water becomes tepid, and the remainder must be washed in cold water. If the board of health orders the place closed, the freezer and utensils are loaded on a push-cart to set up business in another locality, there to operate until the inspector finds it, when the owner moves again. Another condition which causes us considerable trouble is where there are several persons operating in the same factory with one freezer, one gas stove and a kettle for heating water, each having his own cart, and each waiting his turn at the freezer. If the so-called proprietor is ordered to cease operations, the next in turn assumes responsibility and the factory is operated in his name for a time until another change becomes necessary. In one instance, the factory was found in an abandoned chicken-house in the backyard.

Where ice cream is manufactured on a small scale, for sale in drug stores or from push-carts, the local health authorities should make and enforce stringent regulations for their control. This is a matter in which each local board should be vitally interested, as the ice cream made under these unsanitary conditions is sold almost exclusively to the residents of their own municipalities.

There has undoubtedly been a great improvement in the manufacture of ice cream throughout the State, the proprietors realizing the advertising advantages of a sanitary factory where they are able to secure a license from the State Board of Health, but the difficulties above referred to, which arise cheifly in the smaller factories, should not be under-estimated, as they effect a large body of the people of New Jersey.

LOCAL BOARDS.

In a previous report, this Division inaugurated the practice of publishing the conditions of the milk supplies in various municipalities. The results of our inspections there and of our co-operation with the local health authorities have been most gratifying, the vari-

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ous health boards being stimulated to bring up the quality of the milk sold in their respective jurisdictions. It has, therefore, seemed advisable to follow the same course this year.

ASBURY PARK.

During the past year one hundred and twenty dairies supplying Asbury Park with milk were inspected by officers of this Division. These include forty-nine dairies located in the immediate vicinity of that city, or shipping directly thereto. Nineteen dairies deliver their milk to the creamery at Colts Neck, and fifty-two to a creamery at New Egypt, from which points it is shipped to Asbury Park. The average score of all these dairies was 55%. Last year the average score of the one hundred dairies which then shipped milk to Asbury Park was 58.75%. The decrease in the percentage this year is accounted for by the fact that the supply has been derived from different sources, there being a constant change in the dairies supplying this city in the summer season. Some years it is found that milk is secured from a creamery far remote from those which supplied the city during the previous year. Under these circumstances, it is difficult to make any valuable comparisons from year to year. The health officer of Asbury Park, however, is furnished with a record of each dairy as it is taken on, and if the rating is below 60%, the dealer is informed that the milk will not be accepted and he thereupon must procure his supplies from other dairies, which will meet with the board's requirements.

BAYONNE.

At the request of the local health officer, the dairies located within the city limits of Bayonne were inspected twice during the year. These are ten in number, and produce about two thousand quarts of milk a day from two hundred and fifteen cows. The dairies are all located in one district, and most of them adjoin each other. The conditions found in these places were of such a character that the local board of health was informed that none of them could be approved by the State Board of Health. Considerable effort was made

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by the dairymen to improve the situation, but in our judgment clean and wholesome milk cannot be produced in any of them until the conditions are radically changed.

BLOOMFIELD.

The dairies supplying the town of Bloomfield with milk were inspected this year for the first time at the request of the local board. Sixteen dairies were inspected, and they showed an average score of 64%. This is an unusually high percentage for the first inspection, and it is due to the fact that part of the milk supplying the town is derived from some dairies which supply Montclair and the Oranges, and which have been inspected regularly for several years and have very high scores. Two of the dairies scored respectively 30% and 41.25%. The conditions in these places were found to be very unsanitary, and vigorous means were taken to compel better conditions. In one dairy an entirely new cow stable and equipment has been provided, and the last inspection showed very much better conditions. These inspections were made in the latter part of the year, and a re-inspection of those falling below 60% will be made during the coming year.

BORDENTOWN.

Regular inspections of the dairies supplying Bordentown with milk have been made since 1907, and there has been a steady improvement in the sanitary conditions under which milk is produced for this city. In one dairy the first inspection showed 51.50% and the latest 73.75%. Another showed 56.50% on the first inspection and 70% on the latest; another 47% on the first, and 66.75% on the latest, and still another 49.50% on the first, and 61.50% on the latest. The local board of health takes a deep interest in the supply and make application every year for this inspection.

BURLINGTON.

The average score of the dairies supplying the city of Burlington during the past year was 60%. The first inspection of these dairies

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was made in 1909, when the average score was 55.50%. There has been a steady improvement in the quality of the milk sold in this city, which is largely due to the activity of the president of the local board of health. After the last inspection, it was found that an additional dairy was being operated which scored but 24.50%. The local board of health, upon notification by this Board, immediately excluded that milk from sale, as the inspection showed that the proprietor did not, and possibly could not realize the necessity of cleanliness in the handling of his milk.

CALDWELL.

At the request of the local board of health of Caldwell, the first inspection of the dairies supplying that town with milk was made in April of this year. The average of the eight dairies was 67%. A number of these dairies are of a very high type, and have been inspected before, as part of their milk is distributed in towns which have a regular system of inspection.

COLLINGSWOOD.

The dairies supplying milk for use in the borough of Collingswood have been regularly inspected since 1909. During the past year thirty-six dairies were visited, six of which contribute a part of the supply received by a large creamery company. In this creamery the milk from these six dairies is specially set aside for delivery in Collingswood, each of them having a score above the minimum requirement of the Collingswood board of health.

During the past year, this board passed an ordinance requiring each dealer to have a proper sterilizing equipment for all bottles and utensils used in handling milk. This was suggested on account of an outbreak of typhoid fever which was traced to the milk bottles handled by a local dealer.

DOVER.

The first inspection of the dairies supplying Dover was made in March, 1909, and the average in that year was 59.25%. The aver-

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age in 1912 was 66.50%. The supply of Dover is derived from sixteen local dairies; twenty-seven dairies supplying the Andover creamery; twenty-seven supplying the Broadway creamery, and thirteen supplying a creamery at Flanders. The dairies which are located near the city, and from which the milk is delivered by the owners, showed an average score of 69.25%; those supplying the Broadway creamery averaged 63.50%; the Andover creamery, 69.75%, and the Flanders creamery, 63.50%. The board of health of Dover positively requires all dairies supplying the city with milk to reach a standard of 60%, and an arrangement is made with the creamery operators by which an affidavit is furnished, showing that no milk from dairies scoring below 60% will be shipped to Dover.

DUNELLEN.

During the month of June this year, a request was made by the Dunellen board of health for an inspection of their dairies. These dairies were visited, and the average score was 58.25%.

EAST ORANGE.

The first general inspection of the dairies supplying East Orange was made during the year at the request of this board. Our records show that there are three hundred and fourteen dairies which enter into the supply of East Orange. There are only forty-one local dairies whose supply is distributed in that city. The balance of the supply comes from the following ten creameries from which it is shipped to the local dealers:

Lafayette	creamery	New Germantown	creamery
Monroe	"	Clover Hill	"
Andover	"	Roseland	"
White House	"	Lemon, Pa.,	"
Pottersville	"	Brisbin, N. Y.,	"

The average score of the local dairies was 67.50%, and the average of all the dairies was 65.50, which is a very good showing for this milk supply, and is accounted for by the fact that the dairies which ship part of their supply to East Orange supply other large

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cities in this State. Part of it comes from Brisbin, New York, and Lemon, Pa. Our inspectors have visited these creameries and some of the dairies score very high. We are at present engaged in a re-inspection of the dairies supplying this city, and are glad to say we have the hearty support of the local authorities, who are much interested in the purity of their milk.

ELIZABETH.

At the request of the local board of health of Elizabeth, we inspected the dairies supplying the following creameries:

Lafayette creamery	Bloomsbury creamery
Clinton "	West Portal "
Jutland "	Three Bridges "
Flemington "	

In addition to this, the premises of five individual shippers were inspected, the latter showing an average score of 58.25%, and the average of all the dairies being 61.50%. Two dairies supplying this city were condemned by our Board, and a letter received from the Elizabeth board of health shows that the milk from them was excluded from sale there.

GLOUCESTER CITY.

The first general inspection of the dairies supplying Gloucester City with milk was made during the past summer. Forty-nine dairies were inspected, showing an average score of 55%. This included eighteen dairies supplying a Camden creamery, which delivered part of its milk in Gloucester. Several communications have been received from the Gloucester City Board, which show that the authorities are deeply interested in the purity of their milk supply. They have decided that the dairymen whose scores fell below 60% will be given a reasonable length of time in which to make the changes recommended, after which a re-inspection will be asked for, and if it is then found that our recommendations have not been complied with, the milk will be excluded from sale. The secretary, writing

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as to their supply, states: "We believe the adoption of the milk ordinance, which has been in force but six months, has had a tendency to improve the milk supply, and that it has made the milk dealers more careful as to the conduct of their business in a cleanly manner, and assures us a better supply from the dairies."

HADDONFIELD.

No general inspection was made of the dairies supplying Haddonfield during the past year for the reason that no official request was made. A private citizen, however, wrote us several letters regarding dairy conditions and asked for an inspection of ten dairies. This was done, and a report sent to the local board of health, as well as to the citizen referred to. Letters were also sent to the dairymen on whose premises defects were found, and the local board was requested to see that our recommendations had been complied with. No reply, however, has been received from the Haddonfield board.

HIGHTSTOWN.

During the month of November the dairies supplying the borough of Hightstown were inspected at the request of the local board. The average score was 55.25%, which is entirely too low for the supply of an agricultural district where the milk delivered to the consumer is brought direct from the farms.

HOPEWELL.

Inspections of the dairies supplying Hopewell have been made since 1909, and this year the average score was 64.25%. There is a creamery located in Hopewell which receives milk from sixty-nine farmers. Much milk is retailed to the citizens of Hopewell from this creamery. The sixty-nine dairies supplying this creamery have been inspected, and the average score is 53.75%.

JAMESBURG.

Nine dairies were inspected in this locality at the request of the board of health of Jamesburg, and showed an average score of 54%.

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JERSEY CITY.

During the month of February, twenty-six dairies were inspected at the request of the local board of health. A full statement of the conditions found in these dairies is given elsewhere in this report. In addition to that statement, a detailed account of the conditions found on each dairy is herewith given. The average score of the twenty-eight dairies was 44%. The names are omitted in the description, and the dairies are referred to by numbers:

No. 1—This dairy was awarded a fairly good score, but like most of those visited, it was found that the milk pails and utensils were not properly washed, and accumulations of decomposed milk were found on the interior surfaces of the pails, showing that hot water is seldom used for the purpose of washing them. The inspector recommends that the privy within fifteen feet of the cow barn be removed to a greater distance in order to prevent fly infection from that source.

No. 2—In the opinion of the inspector who visited these premises, wholesome milk is not produced. He states that the interior surfaces of the cow stable are unclean; that the milk bottles are kept in the cow barn; that a vat for storing brewers' grains is kept in the stable, causing an offensive odor; that the cattle are fed brewers' grains; that the milk pails show evidences of infrequent cleansing, and that the cow yard and surroundings of the stable are unsanitary.

No. 3—This is a small dairy of four cows, producing about forty quarts of milk daily. There is a privy vault adjoining the cow stable. The milk is sold warm and is bottled in a shed in the rear of the kitchen, the condition of which was unsanitary.

No. 4—This dairy is fairly well kept, and the utensils and containers were found to be clean. The water for washing containers and utensils is drawn from a well which, upon analysis, was found to be polluted.

No. 5—The inspector reports that it is unsafe to produce milk on these premises under the present management. The cows are kept in a crowded condition, and are filthy. The milk is strained and bottled on the floor of a room over the cow barn, which is in a filthy condition. The utensils and containers are unclean. Brewers' grains are fed to the cows and kept in a vat in the stable.

No. 6—The inspector reports that the conditions found on this dairy are extremely unsanitary, and the milk produced under present management, unsafe. The dairy is of a very poor type; the interior surfaces are filthy, and the cows are dirty. At the time of inspection the inspector says that in the milk house, which was in a filthy condition, he saw rats perched on the edge of the cooling vat in which there were full cans of milk, uncovered, ready to be sold. There is a full privy vault adjoining the cow stable, and the pails and utensils were in a filthy condition.

No. 7—This stable contains horses as well as cows, which should not be allowed. The report shows the interior surfaces of the stable to be dirty, and also the cows.

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No. 8—This dairy is reported to be of a poor type, with dirty stables, dirty surroundings and dirty cows. Horses were found in the stable; the milk house is unclean, and the utensils are unclean.

No. 9—This is another dairy of a very poor type; the cows were found to be dirty; the stable dirty, and the milk utensils kept in a small vestibule adjoining the kitchen. The milk is there strained and bottled, subject to the dust and dirt of the yard adjoining, which is littered with all sorts of filth. A large number of fowls are kept in the yard. It is impossible to safeguard the milk properly under conditions existing in this dairy.

No. 10—This dairy is unfit, under present management, to produce safe milk.

No. 11—The conditions in this dairy render the production and handling of wholesome milk impossible.

No. 12—I visited this dairy with Dr. Robertson, and in my examination of the milk pails, I took with my hands large quantities of decomposed milk from the milk pails, and upon inquiry, found that the pails were supposed to be ready to use for next milking. Evidently, warm water is never used for washing these pails, and thick layers, certainly one-eighth of an inch deep, covered the entire interior surfaces. No comments are necessary on this dairy.

No. 13—This dairy is one of the filthiest kind, and a reference to the inspector's report will show that the conditions are very unsanitary, and the dairy unfit for the production of wholesome milk.

No. 14—The inspection of this dairy shows that the conditions were unsanitary. A large number of dogs were kept on the premises, in the stable, in the house and in the yard. Horses are kept in the stable; barrels of manure were in the yard, and the odor there was very bad. The surroundings were very unsanitary, and the milk strained and handled in an impure atmosphere.

No. 15—The inspector reports that the entire surroundings of this place are unsanitary, and under present conditions, wholesome milk cannot be produced.

No. 16—This dairy, according to the report, is unfit for the production of wholesome milk. A reference to the inspector's reports will show the details.

No. 17—This is a dairy of four cows only. The report shows that the cows are kept in a dirty condition, and that the surroundings are unclean; that the milk is handled in the family kitchen and that under present conditions the dairy cannot be approved.

No. 18—A report of this dairy shows that the conditions are unsatisfactory, and that the interior of the cow barn is unclean. Horses are kept in the cow barn; there are accumulations of manure, and the cows are unclean. The dairy was disapproved.

No. 19—This is a poor type of a dairy located on a small plot of ground, and the report shows that the conditions on the premises are unsanitary, and that the utensils are unclean; therefore the dairy cannot be approved.

No. 20—Practically the same conditions exist as on the above dairy, and it therefore cannot be approved.

No. 21—About three hundred quarts of milk are produced daily in this stable for sale in Hoboken. The conditions observed were not sanitary; the stable was dirty; there were manure accumulations; the milk pails were not clean, and there was no milk house.

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No. 22—The owner of this dairy was some time ago refused a permit to maintain his dairy in the city of Hoboken, and then removed it to Jersey City. The methods in use in handling the milk are not good, there being no place but the stable in which to store and prepare for market.

No. 23—The cows in this dairy are kept in a fairly clean condition. The milk is handled in a milk house adjoining a horse stable and the odors are very pronounced. There is also danger of fly infection on account of the proximity of the manure yard.

No. 24—This is a poor type of dairy, which was formerly located in Hoboken. The owner, however, being refused a license there, removed his establishment to Jersey City. The interior of the stable is reported to be dirty. A horse is kept in the cow barn. The milk utensils were unclean: there is insufficient light in the stable; the milk is strained and prepared for market in the stable, and in the opinion of this Board, wholesome milk cannot be produced under present conditions.

No. 25—This is a dairy similar in type to the above dairy, and the inspector states that the milk produced there is unsafe for public distribution. A permit for this dairy was refused by the city of Hoboken.

No. 26—This dairy is similar to the above mentioned dairies, and the conditions reported render the milk produced thereon unsafe for use.

No. 27—This dairy contains five cows and produces eighty quarts of milk daily. The stable is dark and poorly ventilated; horses are kept in the cow barn, and milk pails were found to contain decomposed milk, showing improper washing.

No. 28—The inspector reports that the unsanitary conditions of these premises rendered the milk unsafe for human consumption. Twelve cows are kept and one hundred and fifty quarts of milk are produced daily. The interior of the cow barn is unclean. It contains a child's crib, tubs, barrels and other articles not used in dairy work. Barrels in which brewers' grains are kept are located in the stable and the air is very offensive. The inspector states that it is impossible to produce clean milk on these premises under present conditions.

LAWRENCEVILLE SCHOOL.

Regular inspections of the dairies supplying Lawrenceville School have been made since 1908, the most recent being in January, 1912. Seven dairies supplying this institution were inspected, and are located within short distances of the School. The dairy supplying the largest quantity of milk for a number of years past went out of business, and other sources of supply had to be secured. This accounts for the score being two and one-half points lower than the previous year. The average this year is 64.25%.

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LITTLE FALLS.

Five dairies were inspected at the request of the board of health of Little Falls, and the average score was 53.25%.

MADISON.

A high average has been maintained in the dairies supplying Madison with milk, the average this year being 74.75%. The local health authorities keep their interest in the matter of pure milk, and during the year two dairies, scoring respectively 43.25% and 48.50%, were found to be in an unsanitary condition, and the milk was promptly excluded from sale.

NEWARK.

The city of Newark has undertaken dairy inspection on its own responsibility, and has appointed for this purpose a number of inspectors who visit the dairies supplying their city with milk. During the year we have inspected forty-eight dairies in the immediate vicinity of Newark, and five hundred and eighty-three whose product enters into the supply. The dairies supplying the following creameries were inspected during the year:

Irvington	creamery	Pattenburg	creamery
Roseland	"	White House	"
Chester	"	New Germantown	"
Flanders	"	Pottersville	"
Broadway	"	Flagtown	"
Lafayette	"	Three Bridges	"
Clinton	"	Clover Hill	"
Sunnyside	"	Bloomsbury	"
Jutland	"	West Portal	"
Neshanic	"	Lemon, Pa.,	"

The average score of the local dairies inspected by officers of this Division was 53.50%, and the score of all the dairies averaged 60.25%.

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NEW BRUNSWICK.

The regular annual inspection of all the dairies supplying New Brunswick took place in December, 1911, and this has been supplemented by reinspections as requested. There are one hundred and twenty-one dairies, including twenty-one which supply a creamery in that vicinity. The average score of the twenty-one dairies was 49.75%, and the conditions in them were so bad that the local board excluded the milk from sale in that city. The fact that cream from this creamery is being sold in the city seems to be inconsistent with the exclusion of the sale of milk. The average score of the one hundred dairies was 63.50%. Including the twenty-one dairies rejected, the scores averaged 61%. Our records show that during the year, nineteen dairymen retired from the business for the following reasons:

8 could not meet the local health requirements.
6 removed to other parts of the country.
5 voluntarily withdrew from the business.

The New Brunswick board follows up the dairy inspections by periodical bacterial counts of the milk.

ORANGE.

The milk supply of Orange is derived from forty-seven local dairies, and the mixed milk of six creameries, as follows:

Andover creamery	Chester creamery
Lafayette "	Roseland "
Augusta "	Lemon, Pa., "

The average score of the local dairies is 62.25%, and the average score of two hundred and thirty-five dairies is 65%. Part of the expense of inspecting the Lemon dairies in Pennsylvania was borne by the local board of health of Orange.

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PATERSON.

Previous to this year all of the dairies supplying Paterson with milk were inspected by officers of this Division, and a great deal of work was done in co-operating with the local board to clean up the milk supply. The matter was then left in the hands of the local officer, who has from time to time requested other inspections, which we have made. Fifteen dairies were inspected during the year, the average score being 58.50%.

PENNINGTON.

Four dairies were inspected for the borough of Pennington, and showed an average of 50.75%. None of the dairies met the 60% requirement of this Board, and one scored very low. The local board of health notified this dealer that he must either comply with our recommendations or cease selling milk within the borough. The dealer failed to comply and finally quit the business.

PERTH AMBOY.

The milk supply of Perth Amboy is derived from four hundred and thirteen dairies, as follows: Fifteen local dairies, with an average score of 65.25%; four individual shippers, and the following creameries:

Clinton creamery	Sunnyside creamery	Pattenburg creamery
Stanton "	Flemington "	Jutland "
West Portal "	New Germantown "	Three Bridges "
Bloomsbury "	Pottersville "	Lafayette "
	White House "	

The average score was 66.25%.

In answer to a letter sent to the local health authorities of Perth Amboy, inquiring as to what action had been taken by them relating to certain milk on sale within their jurisdiction, they replied that as this is the month in which they are acting on applications for the renewal of milk licenses, they would defer answering the ques-

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tions until a complete report was ready. Our object in writing the above letter was to learn what action, if any, had been taken regarding the milk of two inferior dairies which have been a source of annoyance both to the local authorities and ourselves during the past year.

PRINCETON.

Two general inspections of the milk supply of Princeton were made during the past year. Thirty-five dairies were inspected during the month of November, 1911, and the average score was 68.75%. During the month of April some thirty-two dairies were inspected, which showed an average of 72.25%. Four dairies scored very low, and their milk was excluded from the general supply. Bacteriological examination of the milk is made periodically by the board of health of this borough.

RAHWAY.

The annual inspection of the dairies supplying Rahway was made in the month of October. Twelve dairies were inspected, and showed an average score of 63.75%. One of the dairies showed a most remarkable increase in its score, namely, from 38% to 72.75%. One of the milk depots inspected in this city showed a very unsanitary condition, and the board of health was advised to take steps to compel better conditions immediately.

ROSELLE.

Three general inspections have been made during the year of the dairies supplying Roselle and Roselle Park. These municipalities have the same health officer, who takes an active interest in the milk supply. In the month of December six dairies were inspected, showing an average score of 65.25%. In the month of May, seven dairies were inspected, showing an average score of 63.25%. In the month of October, ten dairies were inspected, showing an average of 65%. In addition to the local dairies, the mixed milk from La-

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fayette creamery is retailed in these boroughs. Thirty dairies supplying Lafayette creamery were inspected, with an average score of 67.75%. This makes the average score of the forty dairies 67%.

SALEM.

The dairies supplying Salem, seventeen in number, were visited in the month of April, 1912, and the average score was 60.50%.

SOUTH ORANGE.

The one hundred and twenty-six dairies supplying South Orange were inspected during the year, and a number of them reinspected. The supply is derived from the following sources:

11 local dairies.
30 Roseland creamery
30 Augusta "
55 Lemon, Pa., "

Part of the expense of the inspection of the Lemon dairies in Pennsylvania was borne by the South Orange board of health. The average score of all the dairies was 64.75%.

SOUTH ORANGE TOWNSHIP.

During the month of January, 1912, seven dairies supplying Maplewood, South Orange township, Essex county, were inspected, with an average score of 67%.

SOUTH RIVER.

The first inspection of the dairies supplying South River was made at the request of the local board of health in July 1912. Twenty-nine dairies were inspected, with an average score of but 42.25%. Most of these dairies were conducted by persons who do not speak English and have no proper conception of dairy sanitation. The con-

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ditions in nearly all of them were extremely bad, not one of the twenty-nine dairies meeting the 60% requirement of the State Board of Health. The local board of health of South River was furnished a report of these conditions, but we have not been informed as to what action has been taken.

SUMMIT.

Fifteen of the local dairies were inspected, showing an average score of 77%. Many of the herds supplying this city are tuberculin-tested in accordance with an ordinance of the local board. Part of the supply comes from the Fulboam Dairy Company at Andover.

The average score of all the dairies was 76.50%.

TRENTON.

The first general inspection of the dairies supplying Trenton was undertaken during the past summer. In all, six hundred and eighty-one premises were visited. The milk of two hundred and seventy-nine dairies is retailed by the dairymen or delivered to retailers. The balance of the supply is the mixed milk from the following creameries: Castanea Dairy Company, Henry Longacre, Snyder Pasteurized Milk Company, York Dairy Company, all of Trenton, and Belle Mead creamery, Franklin Park creamery, Hopewell creamery, Little York creamery, Reaville creamery, Hope creamery and Fallington, Pa., creamery. The average score of the dairies was 55.25%. A great many of them were found to score very low, but time has not permitted a general reinspection. The owners of all the dairies scoring below 60% have been notified that they must improve conditions before another inspection takes place. A reinspection is now in progress, and so far as we have been able to determine, there is considerable improvement in the dairies visited.

WASHINGTON.

The board of health of Washington requested us to inspect the dairies in this locality, and twenty-one were scored, showing an average of 52.50%.

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WESTWOOD.

Three dairies supplying the borough of Westwood were inspected in the month of March. The average score was 70%, an increase of 7¼ points over last year's score.

WOODBURY.

On account of the occurrence of typhoid fever in the town of Woodbury, the local board of health asked to have the dairies investigated. Eleven premises were accordingly visited, and showed an average score of 52%.

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LIST OF CREAMERIES.

LOCATION.	COUNTY.	NAME OF OPERATOR.
Allamuchy	Warren	Alex. Campbell Milk Co.
Allentown	Monmouth	J. E. Wilson
Alloway	Salem	F. A. Shiveler
Andover	Sussex	Fulboam Dairy Co.
Annandale	Hunterdon	Annandale Milk & Cream Co.
Atlantic City	Atlantic	Abbott's Alderney Dairies Co.
" "	"	Edw. F. Price
" "	"	Caleb E. Shreve
" "	"	Supplee's Alderney Dairies Co.
" "	"	Samuel Wells
" "	"	Wilson Dairy Co.
Augusta	Sussex	T. O. Smith Sons'
Baleville	"	Alex. Campbell Milk Co.
Baptistown	Hunterdon	Geo. H. Scott
Barbertown	"	Wm. Strouse
Beemerville	Sussex	Bordens' Cond. Milk Co.
Belle Mead	Somerset	Farmers' Exchange Co.
Bernardsville	"	Heman Childs
Bevans	Sussex	Seiler Bros.
Blairstown	Warren	Empire State Dairy Co.
"	"	Keystone Dairy Co.
Bloomsbury	Hunterdon	C. W. Vannatta
Branchville	Sussex	Bordens' Cond. Milk Co.
Bridgeton	Cumberland	Bridgeton Cond. Milk Co.
Bridgeville	Warren	H. A. Rauch
Broadway	"	Geo. L. Savidge
Califon	Hunterdon	Phillips & Waldron
Camden	Camden	Wm. E. Cramer
"	"	Garden State Dairies Co.
"	"	Harry R. Read Co.
Changewater	Warren	R. F. Stevens Co.
Cherryville	Hunterdon	C. R. Peterman
Chester	Morris	Seiler Bros.
Clifton	Passaic	John Lotz
Clinton	Hunterdon	James Wyckoff
Clinton Tp.	"	B. E. Tine
Clove	Sussex	Wm. Richman
Clover Hill	Hunterdon	Levi Smith
Colt's Neck	Monmouth	Colt's Neck Creamery Co.
Columbus	Burlington	E. R. Supplee's Sons
Daretown	Salem	Abbott's Alderney Dairies Co.
Davis	Monmouth	Wills-Jones Dairy Co.
Delaware	Warren	F. W. Jensen
Elmer	Salem	Wm. Kelly
Everittstown	Hunterdon	Geo. H. Scott
Flagtown	Somerset	J. Max
Flanders	Morris	Wm. McLaughlin
"	"	Willswood Farm Dairy Co.
Flemington	Hunterdon	Seiler Bros.
Franklin Park	Middlesex	Samuel Adler
Frenchtown	Hunterdon	Robert Harberson

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LIST OF CREAMERIES—(Continued).

LOCATION.	COUNTY.	NAME OF OPERATOR.
German Valley ...	Morris	S. N. Dilts
" " ...	"	J. T. Welch
Glenwood	Sussex	D. Bailey
Great Meadows ..	Warren	Beakes Dairy Co.
Hackettstown	"	Alex. Campbell Milk Co.
Hainesburg	"	Ira C. Hunter
Haledon	Passaic	Heman Tilch
Hamburg	Sussex	Diamond Dairy Co.
Hampton	Hunterdon	Marchant Bros.
Harbourton	Mercer	Samuel A. Burns
Harmersville	Salem	J. Q. Davis
Highland Park ...	Middlesex	W. W. Ten Eyck
Hixon	Warren	C. Vanherwarde
Hoboken	Hudson	Keystone Dairy Co.
"	"	McDermott Dairy Co.
Hoffman	Hunterdon	Isaac Hoffman
Hope	Warren	H. C. Hurley
Hopewell	Mercer	Hernig & Northrup
Hopewell Tp.	"	Marie Berg
Huntsville	Sussex	Bordens Cond. Milk Co.
Idell	Hunterdon	Wm. Strouse
Irvington	Essex	Samuel Lemmerman
Jersey City	Hudson	Greenfield Dairy Co.
" "	"	Howell Cond. Milk Co.
Jutland	Hunterdon	Geo. N. Robinson
Lafayette	Sussex	Newark Milk & Cream Co.
Lamington	Somerset	Luther Childs
Lebanon	Hunterdon	Geo. Clark & Son
Little York	"	York Dairy Co.
Locktown	"	Locktown Dairymen's Association
Lyons	Somerset	Luther Childs
Marksboro	Warren	Central Dairy Co.
McAfee	Sussex	H. S. Chardavoyne
Middlebush	Somerset	Cornelius I. Van Cleef
Middle Valley ...	Morris	Geo. Clark & Son
Milford	Hunterdon	Henry Hauptfuehrer
Millington	Morris	Swain Bros.
Monroe	Sussex	Wm. Provost
"	"	R. F. Stevens Co.
Monroeville	Salem	Wilson Dairy Co.
Montague	Sussex	Seiler Bros.
Montgomery	Somerset	Farmers' Exchange Co.
Mulfords	Sussex	Beakes Dairy Co.
Naughright	Morris	Du Bois Bros.
Neshanic	Somerset	Halprin Bros.
Newark	Essex	Harry F. Backus
"	"	Botkin & Durling
"	"	Wolf Cohn
"	"	Essex Milk & Cream Co.
"	"	Halprin Bros.
"	"	Jacob Max

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LIST OF CREAMERIES—(Continued).

LOCATION.	COUNTY.	NAME OF OPERATOR.
Newark	Essex	Newark Milk & Cream Co.
"	"	H. Allen Osborne
"	"	Wm. Provost
"	"	John Rohdick
"	"	Seiler Bros.
"	"	Levi Smith
New Brunswick	Middlesex	New Brunswick Hygienic Milk Co.
New Egypt	Ocean	Leo G. Balzereit
New Germantown.	Hunterdon	A. C. Durling
Newkirk	Salem	Abbott's Alderney Dairies Co.
Newton	Sussex	Ideal Dairy Co.
North Haledon	Passaic	D. H. Peth
North Branch	Somerset	Geo. W. Field
Oak Grove	Hunterdon	C. R. Peterman
Oak Summit	"	H. O. Smith
Papakating	Sussex	Bordens' Cond. Milk Co.
Paterson	Passaic	John J. Bowers
"	"	Cornelius Dooren
"	"	Otto C. Fulboam
"	"	Geo. Marklin & Son
"	"	Alex. McCoid
Pattenburg	Hunterdon	Geo. N. Robinson
Pemberton	Burlington	Peter Cosgrove
Perth Amboy	Middlesex	Perth Amboy Milk & Cream Co.
Pittstown	Hunterdon	Empire State Dairy Co.
Plainfield	Union	John I. Brokaw
Pottersville	Somerset	A. C. Durling
Price's Crossing	Sussex	Reid Ice Cream Co.
Quarryville	"	Horton-Lewis Cream Co.
Quinton	Salem	Abbott's Alderney Dairies Co.
Raritan	Somerset	Du Bois Bros.
Readington	Hunterdon	Farmers' Exchange Co.
Reaville	Hunterdon	" " "
Richfield	Passaic	J. G. Sprattler
Ringoes	Hunterdon	Harberson Dairies Co.
"	Hunterdon	Wm. Strouse
Roseland	Essex	Henry Becker
Rosemont	Hunterdon	T. Elwood Clark
Roys Crossing	Sussex	Fulboam Dairy Co.
Salem	Salem	Abbott's Alderney Dairies Co.
"	"	Bridgeton Cond. Milk Co.
"	"	J. Q. Davis
Sergeantsville	Hunterdon	T. Elwood Clark
Sharptown	Salem	Wm. Richman
Skillman	Somerset	J. B. Longshore
Sparta	Sussex	Geo. Ihnken
Stillwater	"	McDermott Dairy Co.
Stockton	Hunterdon	Harberson Dairies Co.
Sunny Side	"	James Wyckoff
Sussex	Sussex	Beakes Dairy Co.
"	"	Horton-Lewis Cream Co.

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LIST OF CREAMERIES—(Continued).

LOCATION.	COUNTY.	NAME OF OPERATOR.
Sussex	Sussex	Dennis Reardon
Swartswood	"	Geo. Lodes
Tewksbury Tp.	Hunterdon	Samuel Tiger
Three Bridges	"	Amwell Valley Dairy Co.
Three Mile Run	Middlesex	Clayton M. Quick
Tranquility	Sussex	Central Dairy Co.
Trenton	Mercer	Alpha Buttermilk Co.
"	"	Castanea Dairy Co.
"	"	H. S. Longacre
"	"	Snyder Past. Milk Co.
"	"	York Dairy Co.
Troy Hills	Morris	H. F. Backus
Vails	Warren	Keystone Dairy Co.
Vernon	Sussex	Reid Ice Cream Co.
Warbasse	"	John H. Muller
Wayne Tp.	Passaic	Morris Felley
West End	Monmouth	Slawson-Decker Co.
West Portal	Hunterdon	C. W. Vannatta
White House	"	A. C. Durling
Woodruffs' Gap	Sussex	R. F. Stevens Co.
Woodstown	Salem	Supplee's Alderney Dairies Co.
Wrightstown	Burlington	McEwan Milk Co.

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SANITARY REQUIREMENTS FOR THE GOVERNMENT OF DAIRY PREMISES.

1. The cow stable should be free from all contaminating surroundings such as privy, cesspool, hog-pen, stagnant water, etc.

2. The floors should be tightly constructed of some non-absorbent material and graded so as to permit waste liquids to flow away from the animals.

3. The manure gutters should be constructed of some non-absorbent material, and be at least six inches deep.

4. The feeding troughs or platforms should be well lighted, and kept clean at all times.

5. The ceiling should be tightly constructed so as to prevent chaff and dust from falling through, and should be kept free from hanging straw, cobwebs, etc.

6. There should be sufficient windows in the stable so as to allow at least two square feet of lighting surface for each six hundred cubic feet of air space. The windows should be so placed that the light will be evenly distributed throughout the stable.

7. There should be a proper system of ventilation in the stable so as to keep foul odors out of same and insure a constant supply of fresh air.

8. There should be at least six hundred cubic feet of air space for each animal confined in the stable.

9. The interior of the stable, including walls, ceiling and ledges, should be kept free from dirt, dust, spattered manure or cobwebs. The interior should be frequently white-washed.

10. All animals such as horses, pigs, dogs, etc., should be kept separate and apart from rooms in which milch cows are kept.

11. The silo should not open directly into the stable room; neither should a wet brewers' grains pit or vat be kept there.

12. The bedding used in the stable should be clean, dry and absorbent. The use of horse manure for this purpose is prohibited.

13. A separate building should be provided for cows when sick, and separate quarters for cows when calving; in fact all young stock should be kept out of the milking cow barn, where possible.

14. The manure should be removed daily to field, proper pit or place where the cows will not have access to it.

15. The cow yard should be well graded and drained.

16. The cows should be examined at least once a year by a competent veterinarian.

17. The cows should be kept in a clean condition and free from clinging manure and dirt.

18. All feed should be of good quality and variety.

19. The water supply for cows should be clean, fresh and convenient.

20. The milkers should be in good physical condition.

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21. The clothing of the milkers should be clean; special overalls or suits are recommended for use at milking time.

22. The udders and teats of cows should be thoroughly cleaned before milking.

23. The hands of milkers must be washed before milking.

24. It is recommended that the first few streams from each cow's teat be discarded before milking.

25. Milking should be done with clean, dry hands.

26. The milk should be strained in a clean atmosphere.

27. The milk should be promptly cooled to a low temperature, as near 50°F. as possible; it should also be stored at an even low temperature.

28. A suitable milk house should be provided for handling and storing milk pending delivery.

29. The milk house should be properly lighted and ventilated, and have an impervious floor.

30. All materials not used in the handling or storage of milk should be kept out of the milk house.

31. The milk house should not be located in proximity to a hog-pen, manure pile, privy or other source of contamination.

32. The windows and doors of milk house should be screened.

33. The milk should be hauled to creamery or railroad platform in a covered wagon, and a jacket or other suitable cover should be placed over can in warm weather.

34. The milk pails and utensils should have all seams soldered flush. The small-mouth milking pails are highly recommended.

35. The milk pails and utensils should be rinsed with cold water after using; washed clean with hot water and a washing solution and placed on racks in or near the milk house.

36. The water supply for washing utensils should be clean, convenient and unpolluted.

37. No privy, cesspool, hog-pen, stable, barnyard, or other source of contamination should be located near a well or spring used for water supply.

38. The source of water should be well protected against surface drainage.

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TABLE SHOWING RESULTS OF DAIRY INSPECTIONS BY COUNTIES.

COUNTY.	Total number of inspections.	Number scoring above 60% of the perfect mark.	Number scoring below 60% of the perfect mark.	Number stopped producing milk.
Bergen	4	3	1	0
Burlington	136	58	78	0
Camden	29	8	21	0
Essex	173	98	65	10
Gloucester	48	16	32	0
Hudson	93	21	68	4
Hunterdon	817	268	530	19
Mercer	342	114	226	2
Middlesex	138	57	78	3
Monmouth	78	30	46	2
Morris	174	122	43	9
Ocean	31	4	26	1
Passaic	33	13	17	3
Salem	26	11	15	0
Somerset	326	170	144	12
Sussex	114	100	12	2
Union	78	21	56	1
Warren	237	94	138	5
Madison, N. Y.....	1	1	0	0
Sullivan, N. Y.....	1	1	0	0
Bucks, Pa.	97	24	72	1
Susquehanna, Pa...	8	7	1	0
Wyoming, Pa.....	93	36	54	3
TOTAL	3077	1277	1723	77

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TABLE SHOWING THE NUMBER OF PATRONS AND THE AVERAGE SCORE OF ALL DAIRIES SUPPLYING THE 44 CREAMERIES BELOW.

Location of creamery.	Name of operator.	Number of patrons.	Average score of dairies.
Andover	Fulboam Dairy Co.	27	69.75%
Augusta	T. O. Smith's Sons	30	70.00
Belle Mead	Farmers' Exchange Co.	93	57.25
Blairstown	Keystone Dairy Co.	14	69.00
Bloomsbury	C. W. Van Natta	49	54.75
Broadway	Geo. Savidge	27	63.50
Camden	Harry R. Read Co.	18	59.50
Chester	Seiler Brothers	16	63.00
Clinton	James Wyckoff	34	60.75
Clover Hill	A. C. Durling	16	54.75
Colts Neck	Colts Neck Creamery Co.	19	56.50
Fallsington, Pa.	Charles Carver	11	54.00
Flagtown	Jacob Max	21	57.25
Flanders	Wm. McLaughlin Estate	13	63.50
Flanders	Willswood Farm Dairies Co.	13	63.25
Flemington	Seiler Brothers	52	59.00
Franklin Park	Samuel Adler	21	49.75
Hopewell	Hernig and Northrup	69	53.75
Irvington	Louis Silberman	16	51.00
Jutland	Geo. N. Robinson	34	60.75
Lafayette	Newark Milk and Cream Co.	30	67.75
Lemon, Pa.	Jersey Milk and Cream Co.	55	59.00
Little York	York Dairy Company	14	51.25
Neshanic	Halprin Brothers	34	57.75
New Egypt	Leo G. Balzereit	52	52.50
New Germantown.	A. C. Durling	9	59.25
Pattenburg	Geo. N. Robinson	19	54.75
Pottersville	A. C. Durling	12	64.25
Reaville	Amwell Valley Dairy Co.	40	62.00
Ringoes	Harbison Dairies Co.	66	55.75
Ringoes	William Strouse	47	51.75
Roseland	Henry Becker	30	68.00
Roys Crossing	Fulboam Dairy Company	53	66.25
Stanton	B. E. Tine	7	63.25
Sunnyside	James Wyckoff	38	57.50
Sussex	Dennis Reardon	18	64.75
Three Bridges	Amwell Valley Dairy Co.	51	61.50
Trenton	Castanea Dairy Co.	61	57.25
Trenton	Henry Longacre	6	58.00
Trenton	Snyder Pasteurized Milk Co.	24	58.50
Trenton	York Dairy Company	12	51.50
Vails	Keystone Dairy Company	42	72.25
West Portal	C. W. Van Natta	51	55.25
White House	A. C. Durling	28	60.00

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MISCELLANEOUS COMPLAINTS.

COMPLAINANT.	DATE OF INVESTIGATION.	NATURE OF COMPLAINT.	ACTION TAKEN.
Trenton Board of Health....	Nov. 23, 1911....	Unsanitary dairy; typhoid fever reported among customers.	Owner instructed to clean premises and use better methods in dairy.
West Long Branch Board of Health	Nov. 16, 1911....	Diseased cows on dairy premises.	Cows ordered killed by local board of health and dairy closed.
State Normal School, Trenton.	Dec. 21, 1911....	Complaint of ropiness and sediment in milk.	Remedy suggested and trouble at dairy corrected.
Citizen of West Hoboken.....	Feb. 6, 1912....	Unsanitary cow stable.	Investigated and owner required to improve conditions.
Citizen of Trenton.....	Feb. 8, 1912....	Abnormal condition of milk when delivered.	Investigation showed improper conditions on dairy. Instructions given for improvement of supply.
State Tuberculosis Commission.	Feb. 23, 1912....	Cows said to be kept in poor condition and unsanitary quarters.	Inspection made of premises. Instructions for improvement given.
Citizen of Haddonfield.....	Feb. 28, 1912....	Milk said to be abnormal in taste; readily decomposing.	Ten dairies inspected; local board of health informed of conditions found, and dairymen notified to improve.
Creamery Company in Hoboken	Mar. 11, 1912....	Dealer advertising "pasteurized milk" without having any facilities for the process.	Dealer notified to stop misbranding containers.
Trenton Board of Health.....	Mar. 27, 1912....	Dairy said to be unsanitary.	Owner of dairy given a limited time to place his premises in good condition.
Arlington Tp., Pa., Board of Health	Mar. 27, 1912....	Unsanitary condition of dairy in Hopewell township.	Improvements were immediately made on dairy.
West Hoboken Board of Health	Apr. 10, 1912....	Unsanitary condition of three dairies.	Inspections made, and report sent to West Hoboken board.
Creamery Company in New York	Apr. 17, 1912....	Unsanitary condition of creamery in New York State, shipping milk to Jersey C'y.	Creamery inspected and changes ordered.
Citizen of Livingston.....	Apr. 25, 1912....	Dead horse on dairy premises.	Inspection made and trouble corrected.

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MISCELLANEOUS COMPLAINTS—*Continued.*

COMPLAINANT.	DATE OF INVESTIGATION.	NATURE OF COMPLAINT.	ACTION TAKEN.
State School for Deaf, Trenton.	May 20, 1912....	Complaint that the milk received from dealer soured quickly.	Methods of the dealer thoroughly investigated and found to be improper. Board of trustees of the School notified of the result of the investigation.
Trenton Board of Health.....	June 4, 1912....	Typhoid fever on milk route.	Milk excluded from sale on account of unsanitary premises.
Jersey City High School.....	June 7, 1912....	Milk for sale to pupils exposed in a room with no precautions for its safety.	Local board of health notified.
Veterinarian of Kearney.....	June 7, 1912....	Suspicion of milk from stock yard cows.	Investigation made and result reported to State Board of Health.
Citizen of North Arlington....	June 10, 1912....	Unsanitary dairy.	Investigation made. Kearney board of health notified of result of same.
Division of Sewerage and Water Supplies	July 8, 1912....	Unsanitary dairy.	Investigation made; report sent to Elizabeth board of Health; supply excluded from sale.
Citizen of Elmer.....	July 31, 1912....	Unsanitary dairy.	Investigation made and report sent to local board of health.
Citizen of Belleville.....	Aug. 20, 1912....	Unsanitary dairy.	Investigation made; no milk was being sold.
Veterinarian of Kearney.....	Aug. 23, 1912....	Suspicion of milk from stock yard cows.	Second inspection made, and sale of milk stopped.
New Brunswick Board of Health	Sept. 5, 1912....	Suspected intestinal troubles due to milk.	Investigation made and instructions given for improvement of dairy.
Pompton Lakes Board of Health	Sept. 17, 1912....	Unsanitary dairy.	Complaint unfounded .
Citizen of North Bergen.....	Sept. 25, 1912....	Unsanitary dairy.	Recommendations made for improvement.
Citizen of Harbourton.....	Oct. 8, 1912....	Unsanitary dairies.	Investigation and recommendations made.
Citizen of Union Hill.....	Oct. 9, 1912....	Unsanitary dairy.	Dairy ordered abolished.
Helmetta Board of Health....	Oct. 2, 1912....	Unsanitary dairy.	Investigation made; local board notified and dairy owner ordered to improve.
Realty Company of New York.	Oct. 21, 1912....	Unsanitary dairy.	Recommendation made to Paterson board of health to exclude milk from dairy.

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SUMMARY.

Number of creameries in New Jersey	175
Number of creameries licensed at the end of the year	143
Number of creameries un-licensed at the end of the year	32
Number of creameries abandoned during the year	10
Number of creameries which have changed ownership	11
Number of creamery licenses issued during the year	11
Number of creamery licenses revoked during the year	22
Number of new creameries reported	11
Number of creamery inspections made during the year	260
Number of letters sent to creamery operators, requesting improvements	137
Number of water samples collected from creamery premises	3
Number of dairy inspections made during the year	3,077
Number of dairies scoring above 60%	1,277
Number of dairies scoring between 40% and 60%	1,635
Number of dairies scoring below 40%	88
Number of dairies stopped producing milk	77
Number of quarts of milk produced daily on 2,487 premises visited.	215,295
Number of dairies; initial inspection	1,700
Number of dairies; reinspection	1,377
Number of applications received from local boards of health requesting dairy inspections	37
Number of milk depots inspected	77
Number of water samples collected on dairy premises	25
Number of letters sent to dairymen, requesting improvements	1,721
Number of complaints investigated	29
Number of veterinary reports received	150
Number of cows examined by veterinarian	4,352
Number of cows passed physical examination	4,201
Number of cows tuberculin-tested by veterinarian	2,304
Number of ice cream factories in New Jersey	462
Number of ice cream factories licensed at the end of the year	209
Number of ice cream factories un-licensed at the end of the year	253
Number of ice cream factories abandoned during the year	37
Number of ice cream factory licenses issued during the year	94
Number of ice cream factories changing ownership	24
Number of ice cream factory licenses revoked	10
Number of new ice cream factories reported	84
Number of ice cream factories removing to new location	4
Number of ice cream factory inspections made during the year	648
Number of letters sent to ice cream factory operators	263

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Report on the State Laboratory of Hygiene.

R. B. FITZ-RANDOLPH, DIRECTOR.

To the Board of Health of the State of New Jersey:

GENTLEMEN—I have the honor to submit the following report of the operation of the Laboratory of Hygiene for the year ending October 31, 1912.

The present report deals only with that portion of the laboratory work relating to the examination of specimens from suspected cases of communicable diseases, sent by physicians throughout the State, and with such other bacteriological work as is done at the request of the other Divisions of the Board. That portion of the laboratory work relating to food and drugs, and water supplies and sewerage disposal, will be found in the reports of the Chiefs of the Divisions of Foods and Drugs, and Sewerage and Water Supplies.

In general, the work of the bacteriological laboratory has been the same as has been described in the reports of previous years. No important changes in the methods used, or in the mailing cases provided for physicians, have been made during the year, nor will it be possible to make any radical changes until some provision is made for additional laboratory space. The present laboratory is already too small to enable the routine work to be done in it comfortably.

The time has come when the laboratory staff is not sufficient to handle the routine work. As will be seen from Table A, which follows, the number of specimens of all kinds which are received for examination is steadily increasing, and this increase is most marked in the miscellaneous specimens. If the services of an additional bacteriologist could be secured, it would be possible for us to broaden our work considerably. Unfortunately, we cannot use an assistant bacteriologist to advantage, unless additional working space

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is provided. It is hoped that the legislature, in the near future, will provide quarters for the laboratory somewhere outside of the Capitol Building, where ample working space can be had.

The laboratory is in receipt of a constantly increasing number of requests for the examination of blood by Wasserman's Method for syphilis. It is very desirable that this should be undertaken in the near future as a routine procedure, but it cannot be done until an extra assistant and extra space is provided, both for working space and in which to keep the necessary animals.

The service which the laboratory renders physicians throughout the State is undoubtedly of value. In one respect, however, the early establishment of a state laboratory has worked harm by discouraging the establishment of diagnostic laboratories in our larger cities. A city laboratory, if properly equipped and managed, can render better service to physicians in that city than can possibly be done by a state laboratory located at a distance, because the physician can get his specimens to the city laboratory more promptly and can receive reports of the results of their examination in much less time than if he is dependent on the mails.

The time has now come when every city in the state, having a population of 50,000 or over, should be equipped with a board of health laboratory, and the examination of specimens for diagnosis should be one of the duties of that laboratory.

The financial burden of maintaining laboratories in the smaller cities and towns will probably be found to be too great, although some of them have very efficient and well equipped laboratories now, and the state laboratory will always be needed for the smaller places and the rural districts, but the larger cities should do their own work. The writer has sometimes thought that it might be possible to put into practice some co-operative plan whereby the state laboratory might exercise a general supervision over the work of the city laboratories, supplying the smaller ones with culture media and other things which cannot readily be bought, and which it hardly pays to make up in small quantities. This arrangement would also result in a uniformity of methods in the various laboratories, which is greatly to be desired, but which does not exist at the present time.

One of the principal difficulties under which we labor is that of getting reports to physicians at the earliest possible moment after examinations are completed. Reports sent by mail often take 24

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hours or longer to reach their destination. Our appropriation is not sufficiently large to enable us to telegraph these reports, unless the physician requests it and is willing to pay for the telegram. It would be well to provide sufficient additional funds to enable the laboratory to report the results of all positive diphtheria specimens by telegraph prepaid.

The following Table shows the number and kind of specimens examined since the laboratory was founded.

TABLE A.—SHOWING THE NUMBER OF SPECIMENS OF EACH KIND EXAMINED SINCE THE LABORATORY WAS ORGANIZED.

	1896 and 1897	1898	1899	1900	1901	1902	1903	1904
Diphtheria	627	600	577	974	1,864	1,487	2,000	2,949
Tuberculosis	253	516	766	892	1,211	1,467	1,853	2,344
Typhoid fever	27	175	339	431	739	864	1,333	1,272
Malaria	.....	4	*	53	113	196	151	98
Miscellaneous	7	18	*	30	28	55	132	67
Totals	914	1,313	1,682	2,380	3,955	4,080	5,559	6,730

	1905	1906	1907	1908	1909	1910	1911	1912
Diphtheria	2,896	3,277	3,348	6,090	14,688	8,234	4,529	4,856
Tuberculosis	2,691	2,948	2,402	3,637	4,208	4,520	4,938	5,427
Typhoid fever	1,263	1,556	1,976	2,543	2,261	3,028	3,342	3,899
Malaria	109	126	149	178	197	244	320	335
Miscellaneous	84	126	119	170	240	398	589	796
Totals	7,048	8,033	8,993	12,618	21,594	16,424	13,718	15,313

* The number of these specimens has not been recorded.

This Table shows the gradual increase in the number of specimens examined, except diphtheria, the number of which fluctuates widely from year to year, depending on the number and extent of the epidemics which we have in the State. Especially noteworthy is the relatively rapid increase in the number of miscellaneous specimens. Table B shows in detail what specimens have been classed as "Miscellaneous."

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TABLE B.—SHOWING THE NUMBER AND KINDS OF MISCELLANEOUS SPECIMENS EXAMINED DURING THE YEAR.

	Positive.	*Negative.*	*Total.*
Gonorrhoea	226	350	576
Rabies	43	27	70
B. typhosus, water	...	2	2
B. typhosus, blood	...	1	1
B. typhosus, urine	2	20	22
B. typhosus, faeces	2	34	36
B. typhosus, milk	...	1	1
B. paratyphosus	...	16	16
B. tuberculosis, pus	...	5	5
B. tuberculosis, urine	2	10	12
B. tuberculosis, faeces	...	1	1
B. tuberculosis, meat	1	3	4
B. tuberculosis, cow's lung	1	1	2
B. tuberculosis, hog's lung	...	2	2
B. tuberculosis, milk	...	2	2
B. tuberculosis, sputum (animal inoculated)	1	1	2
B. tuberculosis, spinal fluid	1	1	2
B. diphtheria, pus	...	1	1
B. diphtheria, virulence	2	3	5
Glanders	2	8	10
Anthrax	...	1	1
Gonorrhoea, urine	...	1	1
Streptococcus, pus	2	6	8
Staphylococcus, pus	3	1	4
Staphylococcus, sputum	1	...	1
Trichinosis	...	1	1
Actinomycosis	...	1	1
Treponema Pallida	...	3	3
B. coli, nasal discharge	1	1	2
Poliomyelitis	...	1	1
Meningitis, spinal fluid	...	1	1
Totals	290	506	796

In the report for last year attention was drawn to the increasing number of specimens which were received from suspected cases of rabies. This increase has continued this year, and it is to be expected that it will keep on increasing until some serious effort is made to check this disease, which is now endemic in this state. Legislation is greatly needed which will enable municipal authorities to exercise proper supervision over the keeping of dogs, and it is hoped that the next legislature will see its way clear to pass some kind of a law which will result in the destruction of homeless and wandering dogs, and in the proper confinement or muzzling of all others.

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The following Table shows the number and kind of specimens received during the year, arranged by months.

TABLE C.—SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR, ARRANGED BY MONTHS.

MONTHS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		MISCELLANEOUS.		Totals.
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
November, 1911	300	255	336	43	268	49	9	....	43	9	1292
December, "	419	153	346	57	264	54	15	3	73	10	1394
January, 1912	415	263	371	56	178	26	14	1	46	5	1375
February, "	276	143	390	70	167	20	6	1	61	9	1143
March, "	264	179	465	73	151	14	16	....	50	7	1219
April, "	215	128	443	71	170	20	24	2	62	10	1145
May, "	215	59	476	62	214	36	27	2	57	11	1159
June, "	229	163	387	65	238	32	33	4	44	11	1206
July, "	159	71	360	64	410	190	50	....	42	11	1357
August, "	172	111	373	43	483	67	46	1	74	11	1381
September, "	215	100	343	51	412	62	43	2	60	12	1300
October, "	240	132	400	82	317	57	34	2	67	11	1342
Totals	3119	1737	4690	737	3272	627	317	18	679	117	15313
Grand totals	4856		5427		3899		335		796		

Table D shows the number and kinds of specimens examined, arranged by cities and towns.

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TABLE D.—SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR, ARRANGED BY CITIES AND TOWNS.

TOWNS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		*MISCELLANEOUS		Totals.
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
Allendale	1		2								3
Allentown	8	1	4		1				2	1	17
Alloway			3								3
Alpha			2								2
Andover			1								1
Anglesea			4						1		5
Arlington	7		52	5	12		10	2	7		95
Asbury			2		1						3
Asbury Park	277	292	60	3	56	3	12	1	7		711
Atco			1								1
Atlantic City	48	20	57	6	82	5			4		222
Atlantic Highlands	11	6	4		9	3	3				36
Audubon	13		7		1				1		22
Avon-by-the-Sea									1		1
Baptistown	2	1							1		4
Barnegat			4		5		1				10
Basking Ridge	24	24	2		1						51
Bay Head					2	1	4	1			8
Bayonne	28	2	71	9	23	1	2		12	1	149
Beach Haven			2								2
Bedminster	7	5			1	1			1		15
Belleville			7		2		2				11
Belmar	3		2	1	3		1		4		14
Belvidere	9	3	4	1					1	1	19
Bergenfield			6	1							7
Berlin			1		2						3
Bernardsville	100	69	6		6	1	5	1	14		202
Beverly	3	1	2		3				1		10
Blackwood	3	2	5	1	6						17
Blairstown			3	2							5
Bloomfield	2		11		21	1	2		2		39
Bloomsbury	2	1	6		1						10
Bogota	11	15	6	1	1		1		6	5	46
Boonton	16	9	19	3	10	1	2		2		62
Bordentown	50	42	8	1	3	2					106
Bound Brook	12	2	11		8				2		35
Bradley Beach	1		1						2		4
Bridgeton	1		28	4	4	1			1		39
Brown's Mills			7		4						11
Burlington	12	7	7	2	20				2		50
Butler	5	3	6	1							15
Caldwell	9	7	9	1	10	1	16	1	10	2	66
Califon	4	1			2				1		8
Camden	117	24	213	22	124	27	17		37	10	591
Canton			1								1
Cape May			9		5				1		15
Cape May Court House	3		1		3	1					8
Carlstadt	3		7	1	6						17
Carteret					3						3
Cedarville	1		8	3					1		13
Chatham	2		3	1	1				1		8
Chester									1		1
Chesterfield	1		1								2
Clayton	2		2	2	4				1		11
Clifton	22	7	18		9		3		2		61
Clinton	1	1			3	1					6
Closter	6		7	3	7	1					24
Collingswood	3		7	1	10		3		1		25

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TABLE D.—SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR, ARRANGED BY CITIES AND TOWNS—*Continued.*

TOWNS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		MISCELLANEOUS		Totals.
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
Columbus	....	....	....	....	2	....	....	....	....	....	2
Cranbury	1	....	1	....	....	....	....	....	....	....	2
Cranford	22	3	19	2	15	....	1	....	....	....	62
Crosswicks	1	....	....	....	....	....	....	....	....	....	1
Dayton	....	....	3	....	....	....	....	....	....	....	3
Delanco	149	12	1	1	....	....	....	....	....	....	163
Dennisville	8	....	17	7	3	2	....	....	2	1	40
Dover	18	2	13	2	15	4	....	....	3	....	57
Dumont	10	13	7	1	1	....	1	....	1	....	34
Dunellen	4	....	9	1	9	....	1	....	2	....	26
East Millstone	....	....	....	1	....	....	....	....	....	....	1
East Newark	....	....	8	2	1	....	....	....	....	....	11
East Orange	1	....	89	23	20	....	3	1	....	....	137
East Rutherford	7	2	10	....	8	....	....	....	....	....	27
Eatontown	....	....	2	....	1	....	....	....	....	....	3
Egg Harbor	10	10	9	....	2	....	1	1	....	....	33
Elizabeth	227	104	248	32	104	16	2	....	5	....	738
Elmer	3	2	3	1	....	....	....	....	....	....	9
Englewood	36	34	24	11	13	....	5	....	1	....	124
Englishtown	2	....	2	1	1	....	....	....	....	....	6
Erma	....	....	1	....	....	....	....	....	....	....	1
Fair Haven	3	....	4	....	1	....	....	....	4	....	12
Fairton	....	....	1	....	1	....	....	....	....	....	2
Fanwood	4	1	3	....	....	....	....	....	....	....	8
Farmingdale	11	4	4	....	3	....	....	....	....	....	22
Flanders	4	1	3	1	....	....	1	....	....	....	10
Flemington	34	42	10	4	6	1	....	....	5	....	102
Florence	3	....	6	....	16	2	....	....	....	....	27
Fort Lee	1	....	7	....	3	....	....	....	....	....	11
Franklin Furnace	....	....	....	....	1	....	....	....	....	....	1
Freehold	6	3	28	5	44	11	....	....	6	1	104
Frenchtown	....	....	2	....	....	....	....	....	....	....	2
Garfield	9	13	29	3	7	....	....	....	1	1	63
German Valley	1	....	1	....	1	....	....	....	1	....	4
Gillette	2	5	4	....	1	....	....	....	....	....	12
Gladstone	17	27	2	1	4	....	....	....	5	2	58
Glassboro	....	....	1	....	1	....	....	....	....	....	2
Glen Gardner	....	....	4	....	1	....	....	....	1	....	6
Gloucester	3	1	16	....	5	....	....	....	....	....	25
Grantwood	5	9	2	....	1	....	....	....	....	....	17
Greystone Park	....	....	....	....	6	....	....	....	....	....	6
Guttenberg	26	13	8	2	....	....	....	....	11	10	70
Hackensack	88	18	87	14	49	13	2	....	1	....	222
Hackettstown	2	3	4	3	1	....	....	....	2	....	15
Haddonfield	25	27	25	8	35	5	1	....	2	1	129
Haddon Heights	3	5	1	....	5	2	....	....	....	....	16
Hainesport	2	5	1	1	....	....	....	....	....	....	9
Haledon	....	....	1	....	....	....	....	....	....	....	1
Hamburg	2	2	3	1	2	....	....	....	1	....	11
Hamilton Square	5	4	1	....	2	....	....	....	....	....	12
Hammonton	....	....	3	....	1	....	....	....	....	....	4
Hampton	....	....	5	....	....	....	....	....	1	....	6
Harrison	....	....	7	....	....	....	....	....	1	....	8
Hasbrouck Heights	....	....	2	....	3	....	....	....	1	....	6
Heislerville	....	....	1	....	1	....	....	....	....	....	2
High Bridge	....	....	....	....	4	....	....	....	....	....	4
Highlands	....	....	1	....	1	....	....	....	....	....	2
Hightstown	3	3	10	1	1	....	....	....	1	....	19

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TABLE D.—SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR, ARRANGED BY CITIES AND TOWNS—*Continued.*

TOWNS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		MISCELLANEOUS		Totals.
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
Hoboken	19	2	117	14	144	13	6	....	14	2	331
Holmdel	....	....	1	....	2	....	....	....	....	....	3
Hopewell	....	....	1	1	....	....	....	....	....	....	2
Hudson Heights	....	....	....	....	....	....	....	....	2	....	2
Irvington	32	15	16	11	8	2	....	....	4	....	88
Jamesburg	1	....	1	....	1	....	....	....	1	....	4
Jersey City	32	2	295	36	102	7	3	....	41	9	527
Jersey City Heights	....	....	1	....	....	....	....	....	....	....	1
Kearny	....	....	17	....	4	....	....	....	3	....	24
Keyport	6	7	11	4	4	....	....	....	....	....	32
Lafayette	....	....	1	....	....	....	....	....	....	....	1
Lakehurst	1	....	2	....	....	....	....	....	....	....	3
Lakewood	44	32	29	6	8	1	3	....	5	....	128
Lambertville	2	....	5	....	6	....	....	....	1	....	14
Laurel Springs	....	....	2	....	5	....	....	....	1	....	8
Lawrenceville	40	1	3	....	1	....	....	....	....	....	45
Lebanon	....	....	1	....	....	....	....	....	....	....	1
Leesburg	2	....	2	....	3	1	....	....	....	....	8
Leonia	1	....	....	....	....	....	....	....	1	....	2
Linden	....	....	1	....	....	....	....	....	2	9	12
Linwood	....	....	1	....	....	....	....	....	....	....	1
Little Falls	4	1	6	....	9	....	....	....	....	....	20
Lodi	3	....	3	1	....	....	....	....	....	....	7
Long Branch	6	2	32	3	105	18	4	....	1	....	171
Lyndhurst	1	....	4	1	....	....	....	....	....	....	6
Madison	5	....	19	1	7	....	3	....	....	....	35
Magnolia	....	....	8	1	7	....	....	....	2	....	18
Mandhawkin	....	....	1	2	....	....	....	....	....	....	3
Manasquan	....	....	....	....	4	....	....	....	....	....	4
Mantua	....	....	1	....	....	....	....	....	....	....	1
Maple Shade	....	....	....	....	....	....	....	....	1	....	1
Maplewood	5	....	23	7	11	8	....	....	....	....	54
Marlton	....	....	1	....	1	1	....	....	....	....	3
Matawan	5	....	6	3	1	1	....	....	2	....	18
Mays Landing	2	....	4	1	....	....	....	....	....	....	7
Maywood	1	5	7	3	....	....	....	....	....	....	16
Medford	1	....	....	....	1	1	....	....	2	....	5
Mendham	48	78	6	....	2	....	....	....	....	....	134
Merchantville	6	2	10	2	6	1	....	....	....	....	27
Metuchen	4	1	14	4	6	2	5	....	2	....	38
Midland Park	....	....	12	2	2	....	2	....	4	2	24
Midvale	1	....	....	....	....	....	....	....	....	....	1
Millburn	1	1	1	....	1	....	....	....	....	....	4
Milltown	....	....	7	1	4	....	....	....	....	....	12
Millstone	....	....	....	....	1	....	....	....	....	....	1
Millville	2	....	31	4	2	....	....	....	1	....	40
Milton	....	....	1	....	....	....	....	....	....	....	1
Mintotola	3	....	3	....	1	....	....	....	....	....	7
Montclair	....	....	1	1	....	....	....	....	....	....	2
Montville	2	....	....	....	....	....	....	....	....	....	2
Moorestown	15	7	20	4	60	5	5	....	4	....	120
Morris Plains	....	....	....	....	5	1	....	....	1	....	7
Morristown	18	4	44	4	56	19	5	....	5	....	155
Mount Holly	37	29	16	7	95	25	....	....	1	....	210
Mullica Hill	1	1	1	....	13	....	1	....	4	....	21
Neshanic	....	....	....	....	1	1	....	....	....	....	2
Netcong	2	....	5	....	4	....	1	....	1	....	13
Newark	3	....	40	8	5	....	5	....	2	....	63

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TABLE D.—SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR, ARRANGED BY CITIES AND TOWNS—*Continued.*

TOWNS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		MISCELLANEOUS		Totals.
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
New Brunswick	5	....	69	12	47	6	....	....	11	....	150
Newfoundland	....	....	2	....	3	....	3	....	....	....	8
New Lisbon	....	....	....	....	....	....	....	....	1	....	1
New Market	....	....	....	....	2	....	....	....	....	....	2
Newport	1	....	....	....	....	....	....	....	....	....	1
Newton	18	1	17	2	11	2	....	....	....	....	51
North Asbury Park	....	....	....	....	1	1	1	2	....	....	5
North Bergen	....	....	....	....	3	....	....	....	....	....	3
North Branch	5	7	1	....	....	....	....	....	....	....	13
North Plainfield	....	1	1	....	....	....	....	....	....	....	2
Nutley	5	8	5	....	2	....	1	....	....	....	21
Oakland	....	....	2	....	2	....	....	....	....	....	4
Ocean City	3	3	2	1	12	....	....	....	....	....	21
Ocean Grove	27	2	2	....	9	1	3	1	....	....	45
Old Bridge	....	....	1	....	....	....	....	....	1	....	2
Oradell	12	9	....	....	1	....	....	....	....	....	22
Orange	2	....	85	11	65	6	10	....	10	....	189
Oxford	....	....	2	....	1	....	....	....	....	....	3
Palisades Park	3	....	4	4	1	....	....	....	....	....	12
Palmyra	12	14	5	....	17	4	3	....	....	....	55
Park Ridge	1	....	7	....	8	4	1	....	1	....	22
Passaic	134	113	239	24	74	14	23	1	20	3	645
Paterson	29	4	249	29	115	13	....	....	4	1	444
Paulsboro	8	1	7	1	6	1	1	....	2	....	27
Peapack	3	12	....	....	....	....	....	....	....	....	15
Pedricktown	1	....	1	....	2	....	....	....	....	....	4
Pennington	....	....	3	....	1	....	....	....	....	....	4
Penns Grove	....	....	4	....	3	1	1	....	....	....	9
Pennsville	....	....	4	2	....	....	....	....	....	....	6
Pensauken	3	8	1	....	....	....	....	....	....	....	12
Perth Amboy	1	....	113	17	42	2	1	1	6	5	188
Phillipsburg	2	5	11	2	3	....	....	....	1	....	24
Pitman	1	1	7	1	2	....	....	....	....	....	12
Plainfield	16	6	55	12	34	5	12	....	3	....	143
Pleasantville	26	3	21	6	8	....	....	....	....	....	64
Pluckemin	3	1	....	....	....	....	....	....	....	....	4
Point Pleasant	5	....	2	....	3	2	1	....	....	....	13
Pompton Lakes	....	....	10	4	2	....	....	....	....	....	16
Port Norris	....	....	3	1	2	2	2	....	3	2	17
Princeton	27	4	16	2	26	1	2	....	22	2	102
Rahway	61	19	52	7	80	6	....	....	2	....	227
Ramsey	78	47	11	....	9	....	1	....	....	....	146
Raritan	5	3	....	....	2	....	....	....	....	....	10
Red Bank	6	....	15	5	9	....	1	....	1	....	37
Ridgefield Park	25	12	17	1	12	8	7	....	....	....	82
Ridgewood	....	....	37	7	12	2	5	....	....	....	63
Ringoes	1	....	1	....	3	....	....	....	....	....	5
Riverside	69	5	7	2	5	....	1	....	....	....	89
Riverton	3	3	6	1	3	....	....	....	1	....	17
Rockaway	22	2	14	4	7	5	1	....	5	....	60
Rocky Hill	....	....	2	....	....	....	....	....	1	....	3
Roebling	7	2	14	1	51	13	....	....	1	....	89
Roosevelt	....	....	....	....	1	....	....	....	....	....	1
Roselle	8	2	16	....	3	....	....	....	1	....	30
Roselle Park	5	2	4	....	....	....	....	....	1	....	12
Rutherford	31	43	6	1	8	1	8	1	2	....	101
Salem	19	24	13	3	8	2	1	....	3	....	73
Sand Brook	....	....	1	....	....	....	....	....	....	....	1
Sayreville	....	....	....	....	3	....	....	....	....	....	3
Sea Bright	....	....	8	1	8	....	....	....	....	....	17
Sergeantsville	....	....	1	....	....	....	....	....	....	....	1

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TABLE D.—SHOWING THE NUMBER OF SPECIMENS EXAMINED DURING THE YEAR, ARRANGED BY CITIES AND TOWNS—*Continued.*

TOWNS.	DIPHTHERIA.		TUBERCULOSIS.		TYPHOID FEVER.		MALARIA.		MISCELLANEOUS		Totals
	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	Primary.	Secondary.	
Sewell									1		1
Sicklerville									1		1
Skillman	20	6	6		47	134	1		15	1	230
Somerville	24	15	18	6	17	3	4		2		89
South Amboy			4		4				2		10
South Orange	9	2	42	12	7					1	73
South River			2	1	5	2					10
Sparta			1								1
Spottswood									1		1
Springfield	10	24	11		6						51
Spring Lake			2		15	4	4				25
Spring Lake Beach			1		4		1				6
Stanhope			3		2	1	3				9
Stewartville	2		1								3
Stirling	5	9	2		1						17
Succasunna	1		7	1	1		2				12
Summit	148	64	40	10	29	5	8		3	1	308
Sussex			1		1						2
Swedesboro			3								3
Tenafly	5	5	12		1		3		2		28
Titusville			1						1		2
Toms River	5		5	1	3		1				15
Town of Union	1		22	15	1						39
Trenton	101	16	626	139	606	136	28	3	195	37	1887
Tuckahoe			5	2	1						8
Tuckerton	1										1
Union			2	1					2		5
Union Hill			23		5						28
Vailsburg				1							1
Verona			16	3	8	3					30
Vincentown					2						2
Vineland	7	1	75	11	53	5			24	1	177
Waldwick	1		3								4
Wanaque			1		1						2
Washington			6		10	2	3	1	5		27
Weehawken	5	2	12	1	1		5		1		27
Wenonah	3		1	1	5						10
West Collingswood			2						1		3
West End					1	1					2
Westfield	38	24	29	8	23	3	5		1		131
West Hoboken	7		52	9	9		4		1		82
West Long Branch					1						1
West New York	12	2	51	3	6	1			3		78
West Orange	6	2	9	1	6	1	2				27
Westville			6	2	1						9
Westwood	10		23	2	14	2	5		5		61
Wharton	3		6								9
Whippany					1						1
White House					0	1					2
White House Station			1		1						2
Wilburtha					2						2
Wildwood	6	1	10		1						18
Williamstown	8		4	1	3				2		18
Woodbine	8	10	9		1		1		2	3	34
Woodbridge	68	84	19	3	4		1		1		180
Woodbury	7		27	3	51	7			4		99
Woodcliff			1								1
Woodstown	1		3		2				4	2	12
Blank	10		9		1		1		1		22
Totals	3119	1737	4690	737	3272	627	317	18	679	117	15313

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Table E shows the list of repositories for mailing cases. This Table has been carefully revised during the past year. The laboratory aims to keep the persons mentioned therein supplied at all times with a complete set of the various mailing cases provided by the laboratory. It is requested that persons having repositories notify the laboratory before their stock is exhausted, in order that the supply throughout the state may always be maintained.

TABLE E.—LIST OF REPOSITORIES FOR MAILING CASES.

Allentown	George M. Carslake, Druggist.
Alloway	W. L. Ewen, Physician.
Andover	J. C. Clark, Physician.
Anglesea	Margaret Mace, Physician.
Arlington	W. E. Doremus & C. R. Brown, Physicians.
"	August A. Strasser, Physician.
"	J. B. Thomson, Druggist.
Asbury Park	B. H. Obert, Secretary Board of Health.
Atco	J. I. Hiverder, Physician.
Atlantic City	Board of Health.
" "	Atlantic City Hospital.
" "	Cowperthwaite's Pharmacy, Druggists.
" "	Cuscaden, Inc., Druggists.
" "	H. H. Deakyne, Druggist.
" "	De Dan's Drug Store, Druggists.
" "	Galbreath Pharmacy, Druggists.
" "	Chas. H. Jackson, Druggist.
" "	Lawrence's Pharmacy, Druggists.
" "	Municipal Hospital.
" "	Wm. F. Ridgway, Druggist.
Atlantic Highlands	Board of Health.
" "	George D. Fay, Physician.
Audubon	Audubon Drug Co., Druggists.
"	I. G. Seiber, M.D., Druggist.
Baptistown	F. S. Grim, Physician.
Barnegat	F. N. Bunnell, Physician.
Bay Head	W. F. Donovan, Physician.
" "	W. H. Katzenbach, Physician.
Bayonne	J. A. Balinky & Son, Druggists.
"	Board of Health.
"	J. H. Burchell, Druggist.
"	F. N. L'Estrange, Druggist.
"	Landells Drug Store, Druggists.
"	D. I. Nalitt, Physician.
"	Strauss Bros., Druggists.
Beach Haven	H. Willis, Physician.
Bedminster	J. B. Beekman, Physician.
Belleville	Louis H. Galluba, Druggist.
"	A. H. Osborne, Druggist.
Belmar	Board of Health.
"	Seaside Pharmacy, Druggists.
Belvidere	Faust Bros., Druggists.
Berlin	C. D. Heath, Clerk, Board of Health.
"	Frank Stern, Physician.

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TABLE E.—LIST OF REPOSITORIES FOR MAILING CASES—*Continued.*

Bernardsville	M. Hemmendinger, Druggist.
"	J. Meigh, Physician.
Beverly	E. S. Adams, Physician.
"	Warren St. Pharmacy, Druggists.
Blackwood	Board of Health.
Blairstown	Wm. C. Allen, Physician.
Bloomfield	Board of Health.
"	Wm. W. Keyler, Druggist.
"	Geo. M. Wood, Druggist.
Bloomsbury	James A. Betts, Physician.
"	E. L. Reigle, Physician.
Bogota	G. L. Edwards, Physician.
Boonton	A. E. Carpenter, Physician.
"	John L. Taylor, Physician.
"	Cuthbert Wigg, Physician.
Bordentown	Bordentown Military Institute.
"	Deacon's Drug Store, Druggists.
"	Samuel W. Fitzgerald, Druggist.
Bound Brook	Fetterly & Loree, Druggists.
" "	Lloyd & McNabb, Druggists.
Bradley Beach	Board of Health.
" "	W. K. Bradner, Physician.
Branchville	J. C. Price, Physician & Druggist.
Bridgeton	Board of Health.
"	Charles T. Dare & Son, Druggists.
"	Blew & Blew, Druggists.
"	Albert S. Elwell, Druggist.
"	J. C. Loper, Health Officer.
"	Thos. H. Woodruff, Druggist.
Burlington	Harold B. Allen, Druggist.
"	John W. Davis, Druggist.
"	John Rigg, Druggist.
"	H. B. Weaver, Druggist.
"	Geo. T. Williams, Druggist.
Butler	S. E. Estler, Druggist.
Caldwell	Edwin E. Bond, Physician.
"	Essex County Penitentiary.
"	Wm. N. Hasler, Druggist.
Califon	Board of Health.
Camden	Barrett Bros., Druggists.
"	Geo. M. Baringer, Druggist.
"	Board of Health.
"	Camden City Dispensary.
"	Wm. A. Chamberlain, Druggist.
"	E. W. Collins, Druggist.
"	Cooper Hospital.
"	Henry Curtis, Druggist.
"	R. I. Haines, Physician & Druggist.
"	Oscar N. Hinski, Druggist.
"	E. G. Hummell, Physician.
"	John W. Kohlman, Druggist.
"	Wilson J. Leib, Druggist.
"	Mahaffey's Pharmacy, Druggists.
"	George J. Pechin, Druggist.
"	William P. Weiser, Druggist.

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TABLE E.—LIST OF REPOSITORIES FOR MAILING CASES—*Continued.*

Camden	West Jersey Homeopathic Hospital.
"	Lewis H. Wilson, Druggist.
Cape May	V. M. D. Marcy & Co., Druggists.
" "	James Mecray, M.D., Druggist.
Cape May Court House	Willets Corson, Druggist.
Carlstadt	Albert Niederer, Druggist.
"	H. A. Schmidt, Justice of the Peace.
Carteret	Reason's Pharmacy, Druggists.
Cassville	Otto C. Thompson, Physician.
Cedarville	E. B. Peace, Physician.
Chatham	Weber & Co., Druggists.
"	A. D. Wyckoff, Druggist.
"	W. J. Wolfe, Physician.
Chester	Harris Day, Physician.
"	Alonzo P. Green, Druggist.
"	W. A. Green, Physician.
Clayton	C. F. Fisler, Physician.
Clifton	Clifton Pharmacy, Druggists.
"	Lester F. Meloney, Physician.
Clinton	Wm. H. Baker, Druggist.
Closter	Chas. A. Richardson, Physician.
"	Alfred W. Ward, Physician.
Collingswood	William Chamberlain, Druggist.
"	Edward B. Rogers, Physician.
Columbus	J. E. Dubell, Physician.
Cranbury	B. F. Van Dyke, Physician.
Cranford	John Marien, Druggist.
"	John R. Reay, Druggist.
Crosswicks	Charles L. Dey, Physician.
Daretown	George Fitch, Physician.
Dayton	Edgar Carroll, Physician.
Delanco	H. K. Weiler, Physician.
Dennisville	Eugene Way, Physician.
Dover	Killgore & White, Druggist.
"	Board of Health.
Dumont	J. E. Pratt, Physician.
Dunellen	John Marien, Druggist.
"	Edward Pennock, Druggist.
East Orange	Board of Health.
" "	John G. Boytime, Druggist.
" "	Frank Fieger, Druggist.
" "	Gillbard's Drug Store, Druggists.
" "	Grove St. Pharmacy, Druggists.
" "	T. G. Schriver, Druggist.
Eatontown	H. T. Partree, Physician.
Edgewater	Board of Health.
"	Paul Goldberg, Druggist.
"	S. T. Hubbard, Physician.
Egg Harbor	Board of Health.
Elizabeth	B. F. Davis, Druggist.
"	Fred M. Egger, Druggist.
"	Elizabeth General Hospital.
"	Richard Frohwein, Druggist.
"	C. W. Gorsuch, Druggist.
"	Henry Jacobson, Druggist.

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TABLE E.—LIST OF REPOSITORIES FOR MAILING CASES—*Continued.*

Elizabeth	Samuel M. Jacobson, Druggist.
"	Jefferson St. Pharmacy, Druggists.
"	Martin Reibel, Druggists.
"	Walter I. McCann, Druggist.
"	Oliver & Drake, Druggists.
"	Elias W. Parsons, Druggist.
"	Wm. H. Reibel, Druggist.
"	Harry P. Reebel, Druggist.
"	Board of Health.
"	Richart & Co., Druggists.
"	Samsons' Pharmacy, Druggists.
"	Henry J. Schmidt, Druggist.
"	Harry Schmidt, Druggist.
"	St. Elizabeth's Hospital.
"	Edward Steeb, Druggist.
"	F. C. Strutzlen, Druggist.
Elmer	P. Mason Fox, Clerk, Board of Health.
Englewood	Lewis W. Brown, Druggist.
"	Bureau of Associated Relief.
"	Englewood Hospital.
"	W. R. Kent, Druggist.
"	R. Rockefeller Co., Druggists.
"	Wm. E. H. Schneider, Druggist.
"	H. L. Waldron, Civic Association.
Englishtown	William E. Anderson, Physician.
Fairton	Harry E. Lore, Physician.
Fair Hills	F. L. Field, Physician.
Farmingdale	V. Bacon, Druggist.
"	W. R. Kinmouth, Physician.
Flanders	Board of Health.
Flemington	Franklin C. Burk, Druggist.
Florence	David Baird, Jr., Physician.
Fort Lee	Carl L. Richter, Druggist.
" "	Max Wyler, Physician.
Franklin Furnace	Chas. M. Dunning, Physician.
Freehold	W. B. Duryee, Druggist.
"	Lehvitter's Pharmacy, Druggists.
"	Joseph H. Rosell, Druggist.
Frenchtown	F. H. Decker, Physician.
Garfield	Bradley A. Reynolds, Druggist.
German Valley	S. G. Lee, Physician.
" "	William James, Physician.
Gladstone	M. C. Smalley, Physician.
Glassboro	F. G. Thoman, Druggist.
Glen Gardner	N. J. Tuberculosis Sanatorium.
Gloucester	Atlantic Pharmacy, Druggists.
"	MacLennan's Pharmacy, Druggists.
Grantwood	M. P. Brewster, Physician.
"	Philip E. Brundage, Physician.
"	H. F. Goemann, Druggist.
Grenloch	Camden County Almshouse.
Guttenberg	Board of Health.
"	Jacob B. Zimmerman, Druggist.

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TABLE E.—LIST OF REPOSITORIES FOR MAILING CASES—*Continued.*

Hackensack	Alex. Denig, Druggist.
"	Franck's Pharmacy, Druggists.
"	Hackensack Hospital.
"	Eugene A. McFadden, Druggist.
"	C. V. S. Rea, Druggist.
"	C. R. Shryer, Druggist.
"	D. St. John, Physician.
"	T. E. Van Stone, Druggist.
Hackettstown	C. V. S. Rea, Druggist.
"	A. C. Van Syckle, Physician.
Haddonfield	W. W. Flitcraft, Druggist.
"	R. Willard, Druggist.
Haddon Heights	Chas. E. Shillet, Druggist.
Hainesport	Wm C. Parry, Physician.
Haledon	Leo Joffe, Druggist.
Hamburg	Joseph G. Coleman, Physician.
"	Dr. Uptegrove, Physician.
Hamilton Square	F. B. Zandt, Physician.
Hammonton	Charles Cunningham, Physician.
Hampton	Morris R. Allbright, Druggist.
"	Board of Health.
Harrison	Board of Health.
"	Chas. W. Rothe, Druggist.
"	M. F. Squier, Druggist.
Hasbrouck Heights	J. A. Powelson, Druggist.
Heislerville	Charles Butcher, Physician.
High Bridge	John J. Rufe, Physician.
Highlands	John L. Oppermann, Physician.
Hightstown	D. H. Cunningham, Druggist.
"	Harvey G. Rue, Druggist.
Hoboken	Frank O. Colis, Druggist.
"	A. J. Dittmar, Druggist.
"	Jefferson Pharmacy, Druggists.
"	William Kamlah, Druggist.
"	S. F. LaPiana, Druggist.
"	Wm. T. Lins, Jr., Druggist.
"	Adolph Schmidt, Druggist.
"	Chas. H. Schmidt, Druggist.
"	St. Mary's Hospital.
"	Chas. Sunkel, Druggist.
"	George Wood, Physician.
"	J. F. Zenneck, Physician.
Hopewell	G. E. Pierson, Druggist.
Hudson Heights	Wm. T. Lins, Jr., Druggist.
Imlaystown	R. F. Garrison, Physician.
"	Franklin C. Price, Physician.
Irvington	John F. Aherns, Druggist.
"	Harry McDavit, Druggist.
Island Heights	Henry H. Davis, Physician.
" "	Davis Drug Store, Druggists.
Jamesburg	J. C. Shinn, Physician.
Jersey City	James D. Adams, Druggist.
" "	J. G. Block, Druggist.
" "	Board of Health.
" "	Boulevard Pharmacy, Druggists.

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TABLE E.—LIST OF REPOSITORIES FOR MAILING CASES—*Continued.*

Jersey City	H. A. Bruckner, Druggist.
" "	Wm. Buchbinder, Druggist.
" "	L. E. Carpenter, Druggist.
" "	Frank O. Cole, Druggist.
" "	A. J. Dettmar, Druggist.
" "	L. Donato Di Paola, Druggist.
" "	James Foulke, Druggist.
" "	John C. Gallagher, Druggist.
" "	A. Gold, Druggist.
" "	H. S. Hitchcock, Druggist.
" "	J. M. Halloway, Physician.
" "	Walter Huber, Druggist.
" "	F. Lischke, Druggist.
" "	Charles Leoller, Druggist.
" "	H. F. W. Mayer, Druggist.
" "	C. J. McCloskey, Druggist.
" "	G. A. H. Mielke, Druggist.
" "	Charles Molz, Druggist.
" "	Robert V. Smith, Druggist.
" "	Albert Stehling, Druggist.
" "	Stein & Co., Druggists.
" "	St. Francis Hospital.
" "	E. H. Struckman, Druggist.
" "	Walter R. Taft, Druggist.
" "	R. E. Whilhelm, Druggist.
" "	Samuel Weber, Druggist.
" "	George H. White, Druggist.
Kearny	Henry V. Amerman, Board of Health.
Kenvil	E. W. Kirkpatrick, Physician.
Keyport	R. O. Walling, Druggist.
"	William E. Warn, Druggist.
Kingsland	Board of Health.
Lakehurst	Priest's Pharmacy, Druggists.
Lakewood	The Harrison Drug Store, Druggists.
"	D. H. Hills Drug Co., Druggists.
"	Lakewood Pharmacy, Druggists.
"	Leon A. Taylor, Druggist.
Lambertville	S. W. Codhran & Co., Druggists.
Landing	Board of Health.
Lawrenceville	E. K. Fee, Physician.
Layton	Edward W. Jones, Physician.
Leesburg	George S. Spence, Physician.
Linden	H. Page Hough, Physician.
Lindenwald	Geo. W. Evans, Board of Health.
Little Falls	W. F. VanDeinse, Physician.
Lodi	U. S. Pharmacy, Druggists.
Long Branch	J. W. Bennett, Physician.
" "	E. B. Blaisdell, Druggist.
" "	Board of Health.
" "	Frank K. Gano, Druggist.
" "	Monmouth Memorial Hospital.
" "	S. J. Woolley, Physician.
Lumberton	J. H. Stermer, Druggist.
Lyndhurst	John W. Clarke, Physician.

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TABLE E.—LIST OF REPOSITORIES FOR MAILING CASES—*Continued.*

Madison	Harvey C. De Hart, Druggist.
"	Chas. B. Gee & Son, Druggists.
"	Wm. H. Larison, Druggist.
Magnolia	Leslie C. Lyon, Physician.
Maplewood	B. B. Ranson, Physician.
"	G. H. Taylor, Board of Health.
Matawan	Board of Education.
"	Nathan Ervin, Physician.
"	Sanford's Rexall Pharmacy, Druggists.
Mays Landing	Henry C. James, Physician & Druggist.
Maywood	Frank Freeland, Physician.
Medford	Henry P. Thorn, Druggist.
Mendham	Mendham Pharmacy, Druggists.
"	Leo Robinson, Druggist.
Merchantville	J. W. Kohlerman, Druggist.
"	Lewis R. Whitacre, Druggist.
Metuchen	Alfred L. Ellis, Physician.
"	Board of Health.
"	Lansing Y. Lippincott, Physician.
Middletown	D. D. Hendrickson, Physician.
Midland Park	Joseph Payne, Physician.
Midvale	Shippee's Pharmacy, Druggists.
Millburn	George S. Campbell, Druggist.
Millstone	S. V. B. Taylor, Physician.
Millville	Emergency Hospital.
"	Jesse T. Hughes, Druggist.
"	Smith & Reeves, Druggists.
"	Geo. W. Webber, Druggist.
"	West Side Pharmacy, Druggists.
Minitola	Dr. Dubler, Physician.
Montclair	Mountainside Hospital.
"	M. J. Synott, Physician.
"	Board of Health.
Moorestown	Board of Health.
Morristown	All Souls Hospital.
"	Board of Health.
"	Memorial Hospital.
"	Henry M. Smith, Druggist.
Mount Arlington	C. D. Gordon, Physician.
Mount Holly	H. B. Allen, Druggist.
" "	Jones Pharmacy, Druggists.
Mullica Hill	Samuel F. Ashcraft, Physician.
" "	H. Bailey Chalfant, Physician.
Netcong	Drake-Bostedo Co., Druggists.
"	H. W. Thayer, Druggist.
Neptune Township	Board of Health.
Newark	Thomas W. Corwin, Physician.
"	St. Barnabas Hospital.
"	W. H. Warren & Co., Druggists.
New Brunswick	G. H. Bissett, Druggist.
" "	L. H. Hoagland, Druggist.
" "	Middlesex Pharmacy, Druggists.
" "	Monigan's Pharmacy, Druggists.
" "	Schuyler S. Rust, Druggist.

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TABLE E.—LIST OF REPOSITORIES FOR MAILING CASES—*Continued.*

New Brunswick	P. A. Tilley, Druggist.
" "	The Van Deursen Pharmacy, Druggists.
" "	Edwin R. Van Pelt, Druggist.
" "	John Wells Memorial Hospital.
New Egypt	William C. Jones, Druggist.
Newfoundland	Dr. De Drake, Physician.
Newport	Geo. E. James, Physician.
Newton	Board of Health.
"	Israel L. Hallock, Inspector.
"	. O. Ryerson, Druggist.
Norma	David H. Rappaport, Physician.
Nutley	Board of Health.
"	James Crammond, Druggist.
"	Henry T. Lefferts, Druggist.
Oakland	E. W. Hamilton, Physician.
Ocean City	Board of Health.
" "	Maddock's Drug Store, Druggists.
Ogdensburg	L. C. Burd, Physician.
Old Bridge	I. C. Crandell, Physician.
Oradell	F. O. Blenckstone, Physician.
"	Board of Health.
"	C. W. Datesman, Physician.
Orange	Beegles Drug Store, Druggist.
"	John Drederick Behrens, Druggist.
"	C. E. Dooling, Physician.
"	Board of Health.
"	A. Mosler, Druggist.
"	Orange Memorial Hospital.
"	St. Mary's Hospital.
Palmyra	H. W. Bauer, Physician.
"	Lewis L. Sharp, Physician.
Park Ridge	S. Alexander, Physician.
" "	Henry C. Neer, Physician.
Passaic	Henry Balson, Druggist.
"	William C. Berger, Druggist.
"	Board of Health.
"	Carroll Drug Co., Druggists.
"	General Hospital.
"	Otto Laue, Druggist.
"	Walter Peters, Druggist.
"	Post & Friedrich Drug Co., Druggists.
"	Prebol's Pharmacy, Druggists.
"	Red Cross Pharmacy, Druggists.
"	Eugene Richter, Druggist.
"	B. Rood, Druggist.
"	Joseph Roth, Druggist.
"	St. Mary's Hospital.
"	W. H. Stemmerman, Druggist.
"	St. Stephen's Pharmacy, Druggist.
"	Z. Tegze's Pharmacy, Druggists.
"	Vanriper Co., Druggists.
"	Morris Zimmer, Druggists.

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TABLE E.—LIST OF REPOSITORIES FOR MAILING CASES—*Continued.*

Paterson	Board of Health.
"	Maxwell Bukofzer, Druggist.
"	Eye & Ear Infirmary.
"	Keller's Totowa Pharmacy, Druggists.
"	Paterson General Hospital.
"	Louis Patmor, Druggist.
"	G. E. Pellett, Druggist.
"	St. Joseph's Hospital.
Paulsboro	A. B. Black, Druggist.
"	W. J. Moore, Druggist.
Pensauken	Gerhard Loeling, Physician.
Penns Grove	Board of Health.
" "	B. A. Johnson, Druggist.
" "	Robbins Pharmacy, Druggists.
Perth Amboy	Barnekov & Petz, Druggists.
" "	G. W. Fithian, Physician.
" "	Board of Health.
" "	Dr. Ramsey, Physician.
" "	F. A. Seaman, Druggist.
Phillipsburg	C. E. Griffin, Druggist.
"	Wm. C. Hoffman, Druggist.
Pitman	F. Lummis, Druggist.
"	C. B. Phillips, Physician.
Plainfield	Board of Health.
"	E. F. Chaplin, Druggist.
"	Hodge's Pharmacy, Druggist.
Pleasantville	Thomas F. Crawford, Druggist.
"	J. H. North, Physician.
Point Pleasant	A. B. Johnson, Druggist.
Pompton Lakes	Wm. S. Colfax, Physician.
Port Norris	Samuel T. Day, Physician.
Princeton	Wm. L. Briner, Druggist
"	Chadwick's Drug Store, Druggists.
"	Marsh & Co., Druggists.
Rahway	George F. Brown, Druggist.
"	Davis' Pharmacy, Druggists.
"	New Jersey Reformatory.
"	Joseph G. Smith, Druggist.
Ramsey	H. R. Parvin, Board of Health.
Raritan	A. B. Rohn, Jr., Druggist.
Red Bank	Chas. A. Minton, Druggist.
Ridgefield Park	H. C. Elsing, Physician.
" "	Charles A. Knox, Physician.
" "	F. Ward Langstroth, Physician.
" "	Park Drug Co., Druggists.
Ridgewood	E. B. Thornton, Druggist.
"	H. A. Tice, Druggist.
"	W. L. Vroom, Physician.
Ringoes	Peter R. Young, Physician.
Riverside	Louis M. Hires, Druggist.
"	Warren C. Pine, Druggist.
Riverton	Alex. Marcy, Physician.
"	Chas. Street Mills, Physician.

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TABLE E.—LIST OF REPOSITORIES FOR MAILING CASES—*Continued.*

Rockaway	Frederick W. Flagge, Physician.
"	George H. Foster, Physician.
Rocky Hill	M. Reeve, Physician.
Roebling	Paul Traub, Physician.
Roselle	Jay W. Rewalt, Druggist.
Roselle Park	Board of Health.
" "	George H. Horning, Druggist.
Rosemont	G. N. Best, Physician.
Rutherford	Board of Health.
Salem	Wm. H. Andrews & Co., Druggists.
"	Davis Drug Co., Druggists.
"	Dixon & Fogg, Druggists.
"	Board of Health.
Sea Bright	D. H. Karp, Physician.
" "	Sea Bright Pharmacy, Druggists.
Sea Side Park	Martin Goldsmith, Druggist.
Sergeantville	J. L. Chamberlain, Physician.
Shiloh	H. H. Fritts, Physician.
Skillman	N. J. State Village for Epileptics.
Somerville	John D. Case, Druggist.
"	Philip P. Cron, Druggist.
South Amboy	Board of Health.
" "	D. Meacham, Physician.
South Orange	W. H. Britton, Druggist.
" "	William Kehoe, Druggist.
South River	L. Evans Selover, Physician.
Springfield	Chas. R. Garabrant, Druggist.
"	J. A. Stites, Physician.
Spring Lake	D. H. Hills Drug Co., Druggists.
" "	Ann May Memorial Hospital.
Stanhope	Nelden's Pharmacy, Druggists.
Stewartsville	F. W. Curtis, Physician.
Succasunna	N. H. Adsit, Physician.
Summit	Board of Health.
"	Wm. Tyler Green, Druggist.
"	Overlook Hospital.
"	William H. Rogers, Druggist.
Sussex	Board of Health.
"	H. D. Van Gaasbeck, Physician.
Swedesboro	Guest & Guest, Druggists.
Tenafly	Board of Health.
"	F. G. Bower & Son, Druggists.
"	J. M. MacKellar, Physician.
Titusville	M. S. Simpson, Physician.
Toms River	Board of Health.
" "	Frank Brouwer, Physician.
Town of Union	Board of Health.
" " "	August Frank, Physician.
" " "	R. F. Hellstern, Druggist.
" " "	J. Quigley, Physician.
" " "	Lauterback & Bischoff, Druggists.
" " "	David Weisman, Druggist.

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TABLE E.—LIST OF REPOSITORIES FOR MAILING CASES—*Continued.*

Trenton	Bakers' Drug Store, Druggists.
"	W. H. Barnes, Druggist.
"	Thos. A. Brown, Druggist.
"	Christian Pharmacy, Druggists.
"	J. G. Cook, Druggist.
"	Oscar Davison, Druggist.
"	State Laboratory of Hygiene.
"	Board of Health.
"	Freeman's Pharmacy, Druggists.
"	H. D. Goodenough, Druggist.
"	W. H. Harbourt, Druggist.
"	Holcombe Bros., Druggists.
"	H. S. Hughes, Druggist.
"	A. O. Jackson & Co., Druggists.
"	I. J. Keuper, Druggist.
"	G. S. Laird, Druggist.
"	Louis Lavinson, Druggist.
"	Lewis W. Long, Druggist.
"	G. M. Lynch, Druggist.
"	T. H. MacKenzie, Physician.
"	James L. Mathis, Druggist.
"	McKinley Hospital.
"	Mercer Hospital.
"	M. J. Moore, Druggist.
"	N. J. State Prison.
"	Red Cross Pharmacy, Druggists.
"	Howard N. Richards, Druggist.
"	E. E. Riggs, Druggist.
"	Wm. B. Riker & Son Co., Druggists.
"	Chas. F. Ruopp, Physician.
"	Scott's Drug Store, Druggists.
"	St. Francis Hospital.
"	John J. Strasser, Druggist.
"	David E. Stretch, Druggist.
"	Chas. Stuckert, Druggist.
"	W. Scott Taylor, Druggist.
"	Chas. S. Thatcher, Druggist.
"	The Tidd Pharmacy, Druggists.
"	Tuberculosis Hospital.
"	Wendel's Drug Store, Druggists.
Tuckahoe	S. E. Ewing, Physician.
Tuckerton	Durands Drug Store, Druggists.
Union	J. M. Stites, Physician.
Union Hill	August Frank, Druggist.
Verona	Henry Fray, Druggist.
"	H. B. Whitehorne, Physician.
Vineland	Baker House Pharmacy, Ind., Druggists.
"	W. R. Faulkner, Physician.
"	C. R. Goodfellow, Druggist.
"	N. J. State Institution for Feeble-Minded Women.
"	Red Cross Pharmacy, Druggists.
"	West Side Pharmacy, Druggists.
"	Board of Health.
Waldwick	S. E. Robinson, Physician.

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TABLE E.—LIST OF REPOSITORIES FOR MAILING CASES—*Continued.*

Washington	Jenkins-Meeker, Druggists.
"	The Opera House Pharmacy, Druggists.
Weehawken	H. E. Bischoff, Druggist.
"	August Frank, Druggist.
"	William Kyvitz, Druggist.
"	Lauterbach & Bischoff, Druggists.
"	J. I. Maggard, Druggist.
"	B. Stermick, Druggist.
"	William Koitz, Druggist.
Wenonah	Board of Health.
Westfield	George W. Frotchey, Druggist.
West Hoboken	Frank H. Eckert, Druggist.
" "	Louis C. Lange, Physician.
" "	Joseph J. Parentini, Druggist.
" "	R. Steuer, Druggist.
West New York	A. C. Einbeck, Druggist.
" " "	J. F. Justin, Druggist.
" " "	J. J. Lauterbach, Druggist.
West Orange	Board of Health.
" "	A. M. Bretzfield, Druggist.
" "	George J. Geiger, Druggist.
Westville	Charles E. Davis, Druggist.
Westwood	G. M. Levitas, Westwood.
"	F. B. Palmer Co., Druggists.
"	Theodore E. Townsend, Physician.
Wharton	H. W. Kice, Physician.
Wildwood	Nathan A. Cohen, Physician.
"	William Major.
Williamstown	J. G. Edwards, Physician.
"	L. M. Halsey, Physician.
Woodbine	I. P. Behram, Physician.
Woodbridge	B. W. Hoagland, Physician.
"	R. A. Hirner, Board of Health.
"	Ira T. Spencer, Physician.
Woodbury	A. L. Marshall, Druggist.
"	Merrit Drug Store, Druggists.
"	W. H. Sutton, Druggist.
Woodstown	J. W. Hueston, Physician.
"	C. P. McGeorge, Physician.
Wyckoff	Walter F. Keating, Physician.

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Report of the Division of Food and Drugs.

R. B. FITZ-RANDOLPH, CHIEF.

To the Board of Health of the State of New Jersey:

GENTLEMEN—I have the honor to submit the following report of the Division of Food and Drugs for the year ending October 31st, 1912.

The work of the Division consists in the enforcement of the food and drugs act (Chapter 217 of the Laws of 1907) and its amendments and supplements, which include the Sanitary Law of 1909, the law relating to the production and distribution of shellfish; the law relating to the distribution and sale of oleomargarine (Chapter 84 of the Laws of 1886) its amendments and supplements, the Slaughter House Act (Chapter 295 of the Laws of 1910), the Cold Storage Act (Chapter 189 of the Laws of 1911) and the Methyl Alcohol Act (Chapter 286 of the Laws of 1912.)

In enforcing Chapter 217 of the Laws of 1907 systematic examinations of substances which are liable to adulteration have been made. The investigation of foods other than milk has been confined to certain articles because it is impossible and unnecessary to examine all the foods on the market. The majority of them are usually sold in a state of purity sufficient to meet all reasonable requirements, or they are so skillfully labelled as to escape the provisions of the food law. In most cases the adulterants used are harmless and are added for the purpose of lowering the cost. Occasionally exceptions occur. For example during the year a number of Italian cordials were shown upon analysis to contain wood alcohol.

The examination of foods other than milk is of subordinate interest as compared with the investigation of milk, and during the year over three thousand milk samples have been examined. This Division has made energetic efforts to arouse interest in the Sanitary

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Act and to enforce it. A statement of the work done appears in another part of this report. The last Legislature granted a sufficient appropriation to enable us to make a start in the carrying out of the provisions of the Shellfish Act, and during the year a considerable number of oysters have been examined. During the year all of the canning factories in the State have been inspected one or more times and samples of canned tomatoes, tomato pulp and ketchup have been collected and examined. A description of these inspections will be found elsewhere in this report. The enforcement of the Slaughter-House Act has been shown to be a vast undertaking. Much progress has, however, been made in inspecting slaughter-houses and in correcting improper conditions found to exist in them. But one slaughter-house inspector is employed and he has found it impossible to satisfactorily cover the State. More inspectors are needed for this work.

Our investigations have also shown the need of a comprehensive meat inspection law. Large numbers of diseased cattle are daily being slaughtered for use as food in the State, and some measures should be taken by the Legislature to stop it.

A careful study of the Cold Storage Industry has also been made involving numerous inspections and reinspections of the cold storage warehouses.

In last year's report attention was directed to need for legislation to regulate the egg industry. It is again recommended that an act be passed providing that no person shall engage in the business of breaking eggs, except under a license from the State Board of Health, and fixing a penalty for operating without a license. It is further recommended, that an act be passed requiring the labelling of all "rots" and "spots" and providing that they must be denatured in a manner which will prevent them for use as food.

Specific provision should be made in the food law for the punishment of persons who in response to a demand for an article of a certain quality delivers to the purchaser an inferior article, or a substitute without informing him that this has been done. A standard for lard should be fixed by statute and the words "Imitation," "Blend", and "Compound" should be defined.

There have been examined five thousand nine hundred and ninety-six samples of food and drugs during the year.

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Table number one shows the number of milk and cream samples, and food other than milk and cream examined.

TABLE 1.—SHOWING THE NUMBER OF SAMPLES EXAMINED DURING THE YEAR.

	Above Standard.	*Below Standard.*	*Total.*
Milk and Cream	2,828	315	3,143
Samples other than milk and cream	2,325	528	2,853
Totals	5,153	843	5,996

The following table shows in detail the number of samples of foods, other than milk and cream, and drugs, which were examined during the year.

TABLE 2.—GIVES A DETAILED STATEMENT REGARDING THE NUMBER OF FOODS AND DRUGS EXAMINED DURING THE YEAR.

Articles	*Number above Standard.*	*Number below Standard.*	*Total number of Specimens.*
Allspice, ground	41	....	41
Apple filling	1	....	1
Apple butter	....	2	2
Asparagus, canned	1	....	1
Baking powder	32	....	32
Buckwheat flour	1	....	1
Breakfast foods	21	....	21
Butter	298	144	442
Cake	3	....	3
Candy	20	17	37
Catsup, tomato	11	11	22
Cheese	1	1	2
Chocolate powder	1	....	1
Chicory	1	....	1
Cinnamon, ground	45	....	45
Cloves, ground	41	....	41
Cocoa	10	....	10
Coffee, ground	5	....	5
Coffee extract	1	....	1
Cordials	30	31	61
Cottonseed oil	1	....	1
Currie powder	5	....	5
Egg, frozen	9	1	10
Egg, broken	1	....	1
Eggs in shell	508	140	648
Fish, canned	8	1	9
Flour	1	....	1
Ginger, ground	51	....	51
Glaze, candy	3	2	5
Honey	5	....	5
Ice cream	8	....	8
Jam	1	....	1

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TABLE 2.—GIVES A DETAILED STATEMENT REGARDING THE NUMBER OF FOODS AND DRUGS EXAMINED DURING THE YEAR—*Continued.*

Articles	*Number above Standard.*	*Number below Standard.*	*Total number of Specimens.*
Lard	15	20	35
Lemon extract	29	4	33
Lima Beans	8	....	8
Mace, ground	32	1	33
Milk, butter	2	....	2
Milk, condensed	29	....	29
Milk, dried	1	1	2
Milk, dried skim	....	2	2
Milk, evaporated	15	....	15
Molasses	22	....	22
Mustard, ground	38	1	39
Nutmegs, ground	11	....	11
Oleomargarine	42	5	47
Olive oil	43	13	56
Oysters	123	....	123
Paprika, ground	5	....	5
Peas, canned	18	....	18
Pepper, black	111	....	111
Pepper, red	17	....	17
Pepper, white	55	....	55
Pepper hash	....	1	1
Potato starch	1	....	1
Pumpkin, canned	1	....	1
Raspberry soda	....	1	1
Root beer	1	1	2
Salt, table	8	....	8
Sausage, pork	....	1	1
Soup, chicken, canned	2	....	2
Soup, pea "	2	....	2
Soup, vegetable "	2	....	2
Soup, tomato	21	....	21
Squash, canned	3	1	4
Sugar	29	1	30
Sugar, maple	1	....	1
Syrup, maple	5	....	5
Syrup, sugar	1	....	1
Tomatoes, canned	240	5	245
Tomato paste	4	3	7
Tomato pulp	11	2	13
Tomato, sauce	1	....	1
Tomato, strained	....	1	1
Vanilla extract	56	1	57
Vinegar	8	9	17
Vinegar, amber	3	....	3
Vinegar, blended	3	....	3
Vinegar, brown	1	1	2
Vinegar, cider	69	56	125
Vinegar, grain	1	....	1
Vinegar, malt	....	9	9
Vinegar, distilled	2	....	2
Vinegar, red	5	12	17
Vinegar, syrup	1	....	1

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TABLE 2.—GIVES A DETAILED STATEMENT REGARDING THE NUMBER OF FOODS AND DRUGS EXAMINED DURING THE YEAR—*Continued.*

Articles.	*Number above Standard.*	*Number below Standard.*	*Total number of Specimens.*
Vinegar, syrup fermented	8	....	8
Vinegar, white	19	1	20
Vodka	1	....	1
Whiskey	1	1	2
Whiskey essence	1	....	1
Wine	2	....	2
Worcestershire sauce	13	....	13
Alcohol	2	....	2
Liquor formaldehydi	1	....	1
Magnessii citras effervescens	....	2	2
Potassii bitartras	6	....	6
Sodii boras	3	....	3
Spiritus menthie piperitae	....	1	1
Spiritus myrciae	....	4	4
Tinctura aconiti	....	1	1
Tinctura iodi	5	15	20
Kink-no-more (hair straightener)	....	1	1
Totals	2,325	528	2,853

During the year 3,143 samples of milk and cream were examined of which 315 were found to vary from the legal standards. These may be divided into the following classes.

TABLE 3.—MILK AND CREAM FOUND TO DIFFER FROM THE LEGAL STANDARD.

	No. Samples.
Milk below standard with respect to solids	176
Milk containing added water	76
Milk containing preservatives	2
Skim milk sold from containers not properly marked	1
Cream below the legal standard with respect to butter fat	32
Cream containing thickening agents	4
Cream containing preservatives	12
Cream containing coloring material	12
Total	315

At present the examination of milk is confined to the determinations of total solids, butter fat and the performances of tests for preservatives and coloring matter, together with the necessary tests for the detection of added water. The effect of lowering the standard for milk solids from twelve to eleven and one-half per cent has caused the practice of skimming to become more prevalent than ever, although fewer milkmen are apprehended, because of the

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lower milk solids standard. The practice of adding water to milk is still in vogue, 76 milk samples having been shown to contain added water. It is doubtful if the pernicious practice of adding water to milk, which the farmer seems to have inherited from his ancestors, will ever be completely stamped out. The use of preservatives is still being resorted to, two samples of milk and twelve samples of cream having been found to contain formaldehyde, while four samples of cream were found to contain thickening agents. An effort will be made during the coming year to make a systematic examination of all milk samples for visible dirt.

BUTTER AND OLEOMARGARINE.

Four hundred and forty-two samples were purchased for butter of which one hundred and forty-four were found upon analysis to be oleomargarine. Forty-two samples of oleomargarine were examined of which five were below the standard. The sale of oleomargarine for butter is common in the northern part of the State, especially in the counties of Essex and Hudson. There is no more clever evader of the oleomargarine law than the man who peddles from house to house or sells his oleomargarine from a wagon. Dressed in the guise of a farmer and possessed of a suavity perfected by long practice he sells to the housewife the finest grades of "creamery" at thirty cents per pound. There can be no objection to the sale of oleomargarine as such; when properly made it is a good wholesome product, but its sale as butter will not be tolerated.

FLAVORING EXTRACTS.

Since the adoption of standards for flavoring extracts in this State manufacturers have attempted to evade the law by labelling their products "flavors" or "flavoring" although they are still generally retailed as extracts. Since the average purchaser does not make any distinction between these terms, the terms flavor, flavoring, spirit, essence and tincture as applied to solutions used for flavoring food products have been held to be synonymous with the term extract by the manufacturer. Many vanilla preparations are now on

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the market labelled so as to mislead and yet so skillfully labelled as to escape the provisions of the food law. Many of these are prepared from artificial vanillin and coumarin, containing a very limited amount of pure vanilla extract and artifically colored with prune juice. Of the ninety samples of extracts examined a number were found to be misbranded. In purchasing extracts the purchaser will frequently save himself money if he first reads the label.

VINEGAR.

One hundred and twenty-five samples of vinegar purchased as cider vinegar have been examined and fifty-six have been found to fall below the standard for cider vinegar. Some of these samples were deficient in acid only, others were artifically colored, while still others were cleverly prepared imitations of cider vinegar. There seems but little doubt that a considerable proportion of cider vinegar now being sold in this State is adulterated with distilled vinegar and water. A determined effort will be made this coming year to suppress the sale of cider vinegar not produced exclusively by the alcoholic and acetous fermentation of apple juice.

METHYL ALCOHOL.

That wood alcohol is a violent poison when taken into the human system is a matter of common knowledge, but it is not so generally understood that its repeated external application causes blindness and dementia.

Owing to the alarming increase in the number of cases of wood alcohol poisoning during recent years and the prevalence of the practice of substituting wood for grain alcohol in a wide variety of products, an act to limit its use was drafted by this Division and passed by the Legislature of 1912. This act is published as Chapter 286 of the Laws of 1912.

In brief, this law prohibits the distribution or sale of any food, drug or preparation intended for external or internal use by man which contains wood, or to use chemical nomenclature, methyl, alcohol. A penalty of one hundred dollars for each offense is provided for a violation of this statute.

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The primary object of the act is to prohibit the use of methyl alcohol in wines, cordials, liquors of all kinds, flavoring extracts, bay rum, hair tonics and toilet preparations.

Analyses made in the Laboratory of Hygiene, Division of Food and Drugs, show that methyl alcohol is a common constituent of the cheaper grades of the products enumerated above. When it is considered that methyl or wood alcohol costs but one-fifth the price of ethyl, or grain alcohol, the reason for the substitution is at once apparent.

It is obvious that the most dangerous use of methyl alcohol is its use in compounded liquors, cordials and other beverages.

The liquors and cordials listed below were collected by inspectors of this Division and found to contain methyl alcohol.

Name.	*Methyl alcohol per cent. by volume.*
Verdolino	23.74
Exilir China	25.92
Sambuca	40.96
Fernet Milano	42.78
Crema Manderino	24.62
Sport Caffe	29.68
Ferro China Sansone	27.62
Amaro Felsina	32.66
Vino Vermouth	17.26
Crema Canella	28.54
Gran Liquor del Strega	35.40
Rhum de la Jamaique	53.34
Cento Erbe	30.80
Orange Cordial	25.92
Curacao d'Olande	23.92
Exilir Savoia	42.18
Crema Vainiglia	52.98
Crema Arancio	41.04
Menta Glaciale Alpina	37.76
Anesone Triduo	23.40
Anisette de Bordeaux	25.46
Crema Rose	26.40

For detecting the presence of methyl alcohol the methods of Milliken and Scudder, Riche and Bardy and the Sangle-Ferrioni Cumiasse test as modified by Scudder and Biggs, were used, while for its estimation the immersion refractometer method of Leach and Lythgoe was adopted.

Thirty-one samples of the liquors enumerated above were collected from twelve dealers in Newark and Jersey City. Upon analysis all of these samples were found to contain methyl alcohol.

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Actions to recover the penalty provided by statute were instituted against these dealers and they have since been successfully prosecuted; judgment for the State having been rendered in every case.

In addition to the legal action brought against these dealers, their entire stock of cordials were seized and confiscated. In all two hundred and twenty-one bottles were seized and destroyed.

The extremely dangerous character of these beverages is apparent when one considers that such cordials as Gran Liquor del Strega (Liquor of the Witches) and orange cordial are used among Italians at birthday parties and christenings. They are particularly partaken of by women and children because of their supposed harmless character. The bottles of Ferro China Sansone (Iron Chincona Bitters) state on the label that this beverage "Has gained unlimited admiration for its wonderful curative power. Best medical science has been consulted for its preparation and it is highly recommended by noted physicians for the immediate relief of Malaria, Indigestion, Dyspepsia, Headache, etc. If you are in poor health it is the only remedy, try it and be convinced." The Fernet Milano makes similar claims. Practically all of the bottles are labelled "Superior Quality" or "Extra Quality" and a great many bear a band about the neck on which is printed in Italian: "This Liquor is chemically prepared from substances beneficial to health, it is the best purifier of the blood and is recommended by noted medical authorities." "It is the best operitive and digestive." "Beware of imitations."

It is readily seen that the foregoing claims tend to convince the purchaser that he is getting a superior product and one having marked curative powers, when, as a matter of fact, he is buying a beverage containing a violent poison.

Investigation by this Division revealed the fact that these labels are stock labels and are purchased from firms who make an exclusive business of dealing in such goods. Furthermore, cordials and liquors containing no methyl alcohol were found on the market bearing labels identical with those on the bottles which were found to contain this dangerous adulterant.

SANITARY ACT.

An effort has been made this year to enforce the provisions of the Sanitary Law enacted in 1909. A large number of grocery

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stores, meat markets and fruit stands have been inspected and the owners thereof have been ordered to protect their products from flies, dust and dirt. Long established customs in displaying certain food products had resulted in a lack of appreciation of dangers due to exposed food materials. The practice of exposing perishable fruits and vegetables, which are neither cooked or washed, to contamination by flies and street dust has been so common as not to excite protest. Sanitarians now generally agree that the fly is not only a frequent but an important cause by which disease is spread, hence, the necessity of excluding the fly from all places where foods are prepared or sold. These facts have caused the Board to adopt rules, under authority contained in the Sanitary Act, prohibiting the exposure of certain foods to flies, dust and dirt. The text of these rules will be found on p. 17 of the report of the Secretary.

As the work of sanitary inspection has progressed the value of the Sanitary Law has become more apparent in affording health officials a means by which careless and unclean business men may be controlled and as a means of educating the food manufacturers in sanitary essentials. Increased attention is now being paid by local boards of health officials to the sanitary conditions of the restaurants, meat markets and food-producing establishments within their jurisdiction. It is impossible for the inspectors of this Division to adequately cover the State and the sanitary inspections for the most part should be made by the local board of health officials.

One of the greatest difficulties in the way of betterment of unsanitary conditions has been the utter impossibility of interesting the consumer. The value of publicity as an aid in enforcing the Sanitary Act has clearly been shown during the year. Only in this way can the consumer be made to realize the importance of the law to him.

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TABLE 4.—SHOWING THE NUMBER AND KIND OF PLACES VISITED BY THE INSPECTORS DURING THE YEAR FOR THE PURPOSE OF COLLECTING SAMPLES AND GATHERING INFORMATION REGARDING SANITARY CONDITIONS.

Months.	*Milk Wagons.*	*Milk Depots.*	*Grocery Stores.*	*Drug Stores.*	*Milk Cans.*
November	208	44	427	2	...
December	118	51	428	...	80
January	82	26	467	1	...
February	67	34	400	2	400
March	205	56	561	6	...
April	283	81	339	8	...
May	150	41	395	9	...
June	229	58	365	7	69
July	280	55	251	1	85
August	202	44	292	1	84
September	117	16	76	3	...
October	308	47	318	3	...
Totals	2,249	553	4,319	43	718

	Meat Markets.	*Confectionery Stores.*	*Pickling Establishments.*	*Bakeries.*
November	10	4	1	12
December	1	...	14	...
January	10	...	8	50
February	21	...	...	...
March	27	30	...	...
April	...	...	...	...
May	31	...	...	...
June	1	3	...	...
July	4	3	...	6
August	1	...	...	3
September ...	17	...	...	..
October	10	...	...	1
Totals	133	40	23	72

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	Cold Storage Warehouses.	*Butter Investigations, Stores, Wagons, etc.*	*Canning Factories.*
November	18	19	...
December	10	...	...
January	23	5	...
February	12	10	1
March	21	10	...
April	25	2	...
May	16	3	...
June	18	...	1
July	21	...	8
August	3	...	47
September	3	...	78
October	4	...	20
Totals	174	49	155

	Saloons.	*Restaurants.*	*Miscellaneous.*
November	...	...	14
December	...	...	4
January	...	...	1
February	...	...	...
March	...	...	1
April	...	...	2
May	57	...	2
June	47	...	1
July	20	...	11
August	...	...	5
September	...	...	2
October	15	35	10
Totals	139	35	55

TABLE 5.—SHOWING NUMBER OF ARTICLES EXAMINED BY INSPECTORS DURING THE YEAR, WHICH WERE FOUND TO COMPLY WITH THE LAW, THEREFORE NO SAMPLES WERE TAKEN.

	Milk.	*Butter.*	*Food.*	*Drugs.*	*Cordials.*
November	513	514	645	170	...
December	362	500	662	20	...
January	340	598	1,148	30	...
February	345	679	929	133	...
March	526	732	855	65	...
April	585	583	1,085	70	...
May	517	530	838	69	...
June	534	439	767	50	136
July	842	261	744	55	...
August	498	399	591	40	...
September	392	130	151	7	...
October	740	647	869	202	40
Totals	6,194	6,012	8,284	916	176

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TABLE 6.—SHOWING THE PLACES VISITED BY INSPECTORS AND NUMBER OF VISITS TO EACH PLACE.

Adelphia	1	Collingswood	4
Aldine	4	Columbia	1
Allentown	2	Columbus	4
Alliance	1	Cookstown	2
Alloway Junction	1	Cranbury	4
Alloway	2	Cranford	5
Andover	1	Crosswicks	3
Anglesea	4	Daretown	6
Andersontown	2	Davis	1
Annandale	1	Dayton	1
Asbury	2	Deerfield	4
Asbury Park	3	Delanco	2
Atlantic City	26	Dobbins Station	1
Atlantic Highlands	1	Dover	7
Audubon	1	East Newark	1
Augusta	1	East Orange	3
Barnegat	1	East Millstone	1
Barrington	1	East Rutherford	1
Bayonne	9	Eatontown	1
Beach Haven	3	Edgewater	1
Belle Mead	1	Egg Harbor	1
Belleville	1	Elizabeth	26
Belmar	2	Elizabethport	9
Belvidere	2	Eldora	2
Berlin	2	Elmer	7
Bergenfield	2	Englewood	4
Bernardsville	1	Englishtown	1
Beverly	3	Erma	1
Bivalve	1	Etra	1
Blackwood	2	Everittstown	1
Blairstown	2	Ewan	1
Bloomfield	3	Fairfield	1
Bloomsbury	1	Fairton	2
Bordentown	12	Farmingdale	1
Bound Brook	3	Flanders	1
Boonton	3	Flemington	5
Bowne	1	Florence	2
Bradley Beach	1	Folsom	1
Branchville	1	Franklin Park	1
Bridgeport	1	Freehold	9
Bridgeton	19	Frenchtown	4
Broadway	2	Garfield	1
Burlington	13	German Valley	1
Butler	2	Gibbsboro	2
Buttzville	1	Gibbstown	1
Caldwell	1	Glassboro	7
Camden	128	Glenwood	2
Canton	3	Gloucester	5
Cape May	6	Goshen	1
Cape May Court House	1	Greenvillage	1
Carmel	1	Grenloch	1
Cedarville	3	Greenwich	4
Clayton	3	Groveville	1
Clementon	2	Guttenberg	1
Clinton	4	Hackensack	6
Cold Spring	1		

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TABLE 6.—SHOWING THE PLACES VISITED BY INSPECTORS AND NUMBER OF VISITS TO EACH PLACE—*Continued.*

Hackettstown	1	Milford	1
Haddonfield	5	Millburn	2
Haddon Heighs	1	Millhurst	1
Hamburg	3	Milltown	1
Hammonton	2	Millville	7
Hampton	1	Monroeville	4
Hainesburg	1	Montclair	2
Hancock's Bridge	2	Montville	2
Harrison	8	Moorestown	2
Harrisonville	1	Morganville	3
Hazlet	2	Morris Plains	3
Hilton	1	Morristown	9
Hightstown	7	Mount Holly	8
Hoboken	28	Mount Pleasant	1
Holly Beach	5	Mullica Hill	1
Hope	1	National Park	1
Hopewell	8	Neshanic	4
Houses	1	Netcong	1
Huntsville	1	Newark	147
Imlaystown	1	New Brunswick	19
Irvington	8	New Egypt	1
Iselin	1	Newfield	1
Island Heights	1	Newkirk	1
Jamesburg	1	Newport	2
Jersey City	156	Newton	11
Keansburg	1	New Village	2
Kearny	8	Norma	2
Keyport	1	North Banch	1
Lafayette	1	Notthfield	2
Lakewood	2	North Vineland	1
Lambertville	3	Nutley	1
Laurel Springs	3	Ocean City	1
Lebanon	1	Ocean Gate	1
Leesburg	2	Ocean Grove	2
Lewistown	2	Orange	16
Lindenwald	1	Palmyra	1
Little Falls	2	Passaic	15
Lodi	3	Paterson	33
Long Branch	4	Pattenburg	1
Macopin	1	Paulsboro	3
Madison	2	Peapack	1
Magnolia	1	Pedricktown	3
Manahawkin	1	Peermont	1
Manasquan	10	Pemberton	4
Mantua	1	Pennington	8
Maplewood	2	Penns Grove	1
Marksboro	1	Pennsville	2
Martinsville	1	Pensauken	1
Matawan	10	Pequannock	1
Maurice River	1	Perth Amboy	13
Mauricetown	1	Phillipsburg	3
Mays Landing	1	Pitman	3
McAfee	2	Pittstown	1
Mendham	1	Plainfield	7
Merchantville	4	Pleasantville	3

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Point Pleasant	1	Sussex	6
Pompton Lakes	1	Swedesboro	6
Pompton Plains	1	Tenafly	1
Port Norris	1	Tinton Falls	1
Princeton	2	Toms River	4
Quarryville	2	Towaco	2
Quinton	4	Townsbury	1
Rahway	7	Tranquility	1
Ramsey	2	Trenton	241
Red Bank	1	Tuckahoe	1
Riegelsville	1	Tuckerton	4
Ringoes	1	Turnersville	2
Rio Grande	3	Union	1
Riverdale	1	Union Hill	5
Riverside	4	Vails	1
Riverton	6	Vernon	1
Roebling	5	Verona	2
Roselle	4	Vienna	2
Rosenhayn	1	Vincentown	1
Rutherford	6	Vineland	6
Salem	10	Warrenville	1
Sea Isle City	1	Washington	5
Seaside Park	1	Washington Valley	1
Sergeantsville	1	Wenonah	1
Sewell	1	Westfield	3
Sharptown	2	West Hoboken	7
Shiloh	1	Westmont	4
Shrewsbury	1	West Orange	1
Somers Point	2	West Orange Mountain	1
Somerville	4	West Portal	1
South Amboy	3	Westville	3
South Dennis	1	Wildwood	1
South Orange	6	Williamstown	5
Sparta	1	Windsor	2
Spottswood	1	Woodbine	3
Spring Lake	1	Woodbury	4
Stanhope	1	Woodstown	10
Sterling	3	Wrightstown	3
Stewartsville	1	Yardville	1
Stockton	1	Yorktown	4
Summit	3		

CANNING FACTORIES.

During the year a large number of inspections of canning factories in this State, made by inspectors of this Division, to enforce the Sanitary Act, showed the necessity of definite rules governing the operation of canning factories. Two hearings conducted by the Board of Health of the State of New Jersey, well attended by owners and operators of canning factories, brought out lengthy discus-

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sions of the processes of canning and of the points needing remedial legislation. At the same time an investigation was conducted in the State Laboratory of Hygiene, by the Division of Food and Drugs to arrive at satisfactory standards by which the canned goods could be judged.

As a result of these hearings and investigations rules were adopted by the State Board of Health at a regular meeting held April 29th, 1912, under authority contained in Section 31 of Chapter 217 of the laws of 1907, and Section 11 of Chapter 231 of the laws of 1909. These rules will be found in the Report of the Secretary.

One hundred and fifty-two inspections have been made during the past year at fifty-nine canning factories. From these inspections it has been learned that tomato pulp, paste or soup stock is made from whole sound tomatoes at thirteen factories; tomato catsup from whole sound tomatoes at seven factories; tomato pulp, paste or soup stock from skins and cores at eight factories; tomatoes are canned at forty-six factories; peas at four factories; pumpkin at three factories; pears at four factories; lima beans at eight factories; berries at eight factories; rhubarb at one factory; peppers at one factory; and beets at six factories.

From the above information it is seen that tomatoes and tomato products form by far the greater part of the foods canned in this State. During the past season much stress has been placed upon the enforcement of the first four articles of the rules which regulate the sorting and washing of tomatoes, especially in those establishments where skins and cores are used for the manufacture of pulp, paste, catsup or soup stock. In the removal of unsound material it has been the practice to install a conveying table leading to the washer, and stationing one to four people along this table to remove the unsound material by inspection. The success of this work depends upon the care of the individual sorter and also upon the condition of the stock at the time of sorting. Following the removal of unsound material it is of great importance to wash thoroughly all tomatoes to remove all sand and dirt. Using such care in the preliminary sorting and washing and having adequate machinery to handle the stock in a cleanly and expeditious manner, after the skins and cores have been removed at the peeling tables, there seems to be no reason why tomato trimmings should not be used for the preparation of pulp or paste.

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TABLE 7.—BACTERIAL CONTENT OF PULP, PASTE AND CATSUP.

OWNER OR COMPANY.	LOCATION.	Product examined.	Materials used in preparation.	Sample number.	Average percentage of fields showing molds.	Bacteria per cubic centimeter.
B. S. Ayars Sons & Co. ..	Bridgeton ..	pulp	skins and cores	L 1520	10	18,000,000
Bridgeton Preserving Co.	Bridgeton ..	catsup	" " "	L 1089	8	22,000,000
Clinton B. Ayars	Bridgeton ..	puree	whole tomatoes	L 1516	4	16,800,000
John E. Diament Co. ...	Cedarville ..	pulp	" "	L 1083	2	14,800,000
John E. Diament Co.	Tuckahoe ...	Puree	" "	L 1062	2	16,800,000
Fort Stanwix Canning Co.	Glassboro ..	pulp	skins and cores	L 1521	10	23,400,000
Samuel L. Kelty	Quinton	paste	" " "	L 996	4	19,200,000
Samuel L. Kelty	Quinton	"	" " "	L 1092	4	16,800,000
Philadelphia Pickling Co.	El Dora	puree	whole tomatoes	L 1085	3	19,440,000
Edward Pritchard	Bridgeton ..	"	" "	L 1514	2	17,800,000
Charles Raab	Williamstown	pulp	" "	L 1518	4	16,800,000
" "	"	"	skins and cores	L 1523	2	16,800,000
Charles Raab	"	"	whole tomatoes	L 1524	2	21,600,000
" "	"	"	skins and cores	L 1537	2	12,000,000
Rio Grande Packing Co. .	Rio Grande .					
Salem Canning Co.	Quinton	puree	whole tomatoes	L 992	2	22,600,000
Salem Canning Co.	Quinton	"	" "	L 1522	3	19,600,000
Salem Supply Co.	S. Dennis ...	pulp	skins and cores	L 1517	5	16,800,000
George Roncoroni	Daretown ..	paste	whole tomatoes	L 1064	7	18,200,000
Sylvan Roncoroni	Pennsville ..	"	skins and cores	L 1541	15	31,200,000
Beechnut Packing Co. ..	Matawan ...	pulp	whole tomatoes	L 1421	4	16,200,000
Louis Vecchi	Hazlet	"	" "	L 1094	10	34,400,000
" "	"	paste	" "	L 1095	24	23,200,000
" "	"	"	" "	L 1418	15	49,200,000
Vesuvian Preserving Co.	Vineland ...	"	skins and cores	L 1512	6	20,800,000
Vesuvian Preserving Co.	Vineland ...	sauce	whole tomatoes	L 1513	2	11,600,000
George D. Worthley	Matawan ...	pulp	skins and cores	L 1420	8	23,800,000
" " "	"	"	" " "	L 1419	6	21,200,000
" " "	"	"	" " "	L 1401	8	24,000,000
" " "	"	"	" " "	L 1402	6	24,000,000
" " "	"	"	" " "	L 1505	12	22,800,000
" " "	"	"	" " "	L 1507	10	24,300,000
" " "	"	"	" " "	L 1508	12	19,200,000
" " "	"	"	" " "	L 1501	10	21,600,000
" " "	"	"	" " "	L 1506	14	25,200,000
Crino Seed Company	Morganville .	catsup	whole tomatoes	L 1096	2½	14,500,000
Fogg & Hires	Quinton	pulp	" "	L 578	2	21,600,000

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A large number of examinations made in the State Laboratory of Hygiene, by the Division of Foods and Drugs, indicate that such a product made from skins and cores may come within the limits of the standards adopted by the Board of Health of the State of New Jersey. However, a comparison of the results from pulp, paste or soup stock made from tomato trimmings and those made from whole sound tomatoes shows that whole sound tomatoes produce a product far superior to that made from tomato trimmings. This product from skins and cores is much less attractive than a like product made from whole sound tomatoes in its dull red appearance and in the small pieces of stems or cores frequently seen in it.

During the year examinations of canned tomatoes were made in the laboratory of twenty-one samples of No. 10 cans, sixty-four samples of No. 3 cans, and nine samples of No. 2 cans. In each case the sample consisted of six cans. Two out of twenty-one samples of No. 10, one out of sixty-four of No. 3 were found to be below the standard adopted by the State Board of Health.

Article 15 provides that rooms in which manufacturing is carried on must be provided with smooth, water tight floors which can be properly cleaned, and such floors must be cleansed daily. It has been found that forty-four factories are provided with wooden floors, four with brick, and nine with cement. Cement floors are being placed in the new factories, and in factories which are being repaired.

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Article 11 provides that adequately equipped wash rooms, and places where employees may change their clothing must be provided for male and female employees, which must be separate and apart from any room where manufacturing or storage of food products is carried on. Wash rooms for female emplyees have been constructed in thirty-eight factories and similar rooms for men have been provided in nineteen factories. The canners have raised objections to building these rooms separate from the rooms where foods are prepared. In most cases foreign laborers perform the largest proportion of the work. If these rooms are apart, the foreman or forewoman has no means of knowing that the emplyees wash their hands before beginning work and after leaving the toilet unless some one is placed in charge of the rooms. However, this article is an abstract from a State law, which cannot be altered by the State Board of Health

It has been found tha at a large proportion of the canning factories little attention is paid to the toilets. Many of the factories are located in country places where it is inconvenient to provide flush closets and privy vaults are generally used. These privy vaults have almost always been found to be dirty and with no provision to prevent entrance and exit of flies. Where such conditions have been found, notices have been sent to clean and make fly tight such closets.

In the smaller towns where most of the canning factories are located, trouble is experienced by the canners in securing labor during the canning season from the inhabitants of the towns. Most canners secure Italian families from the large cities to do this work. Bunk houses are built in the immediate neighborhood of the canning factories in which the foreign laborers are quartered. With a few exceptions these bunk houses are badly lighted and poorly ventilated. In most places no wash basins or sinks are provided in the bunk houses. A water pipe or a well is generally located from thirty to sixty feet from the bunk houses in the neighborhood of the cooking shed. While water is furnished in this way, these people are not likely to take the trouble to use this water for washing before going to work. The children of these people are generally numerous and are taken by the mothers to the factories. Here, the older ones may help the mothers in peeling while the younger ones play about the factory or in the wash rooms.

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TABLE 9.—SHOWING CONDITIONS IN CANNING FACTORIES AFFECTING EMPLOYEES.

OWNER.	LOCATION.	Approximate number white women.	Approximate number colored women.	Approximate number Italian women.	Wash Rooms Men. Provided.	Wash Rooms Men. Condition.
Allivine Canning Co.	Norma	60	.....	60	yes	clean
B. S. Ayars Sons & Co.	Bridgeton	200	5	10	no	.....
Bridgeton Preserving Co.	Bridgeton	.....	.....	.....	"	.....
Clinton B. Ayars Canning Co.	Bridgeton	.....	50	45		fairly
		.....	.....	Syrian	yes	clean
Walter S. Baker	Bridgeton	70	.....	.....	no	.....
Walter S. Baker	Road Bridgeton to Milliville	75	.....	.....	"	.....
Abe Brakeley Estate	Bordentown	30	.....	.....	"	.....
Joseph Brakeley	Freehold	200	.....	.....	yes	clean
Joseph Campbell Co.	Camden	.....	.....	.....	"	"
Mrs. H. B. Chew Canning Co.	Woodstown	20	.....	.....	no	.....
R. V. Crine Seed Co.	Morganville	30	.....	.....	yes	clean
Curtice Brothers	Woodstown	40	.....	60	"	"
Davis & Lippincott	Woodstown	50	100	.....	no	.....
John E. Diament Co.	Cedarville	120	.....	.....	yes	clean
John E. Diament Co.	Tuckahoe	10	.....	40	no	.....
Fairdale Canning Co.	Bridgeton	30	.....	.....	"	.....
Fairton Canning Co.	Fairton	20	30	30	"	.....
Fogg & Hires	Hancocks Bridge	.....	.....	70	"	.....
Fogg & Hires	Pennsville	50	.....	100	"	.....
Fogg & Hires	Quinton	.....	.....	150	"	.....
Franco-American Food Co.	Jersey City	200	.....	.....	yes	clean
Fort Stanwix Canning Co.	Glassboro	.....	.....	150	no	.....
Fruit Farm Preserving Co.	Cedarville	50	.....	.....	yes	clean
Mrs. Laura Hancocks	Salem	40	.....	.....	no	.....
Hannan Brothers	Deerfield	25	.....	.....	"	.....
Heinz Co.	Salem	....	.....	.....	yes	clean
LaFayette Henderson	Leesburg	20	.....	40	no	.....
Hopewell Valley Canning Co.	Hopewell	60	.....	.....	"	.....
Samuel Kelty	Quinton	40	.....	.....	yes	clean
George D. Lanning	Bridgeton	25	.....	.....	no	.....
William Lanning & Son	Bridgeton	90	.....	30	yes	clean
Mrs. J. W. Lippincott	Salem	6	.....	.....	no	.....
Pennington Canning Co.	Pennington	30	.....	.....	"	.....
Philadelphia Pickling Co.	El Dora	60	.....	.....	yes	clean
Edward Pritchard	Bridgeton	75	.....	.....	"	"
Charles Raab	Williamstown	10	.....	.....	no	.....
Rio Grande Packing Co.	Rio Grande	.....	.....	30	yes	clean
Salem Canning Co.	Quinton	20	.....	40	no	.....
J. V. Sharp Canning Co.	Williamstown	30	.....	60	"	.....
Edmund Shimp	Hancocks Bridge	25	.....	.....	"	.....

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Wash Rooms Women.		Toilets. Men.		Toilets. Women.			
Provided.	Condition.	Location.	Condition.	Location.	Condition.	Clothing. Women.	Remarks.
yes	clean	Inside	clean	Inside	clean	clean	Children not in factory.
"	"	outside	dirty	outside	clean	fairly clean	No bunk house. No children in factory.
.....	.....	"	"	.....	.....	fairly clean	
yes	fairly clean	"	"	outside	dirty	dirty	Quarters poorly lighted and ventilated. No wash room. Children in factory.
yes	poor	"	"	outside	fairly clean	dirty	Local women only.
yes	clean	Inside	clean	Inside	clean	not clean	Local women only.
no	.....	outside	clean	outside	clean	"	Local women only. No children in factory.
yes	clean	Inside	clean	Inside	clean	"	Poles.
"	"	"	"	"	"	"	No children in factory.
no	.....	outside	clean	outside	clean	"	Local women only.
yes	clean	Inside	clean	Inside	clean	"	" " "
"	"		not	Inside	clean	"	No children in factory.
		outside	clean				Quarters reasonably good.
"	"		fairly			not	
		outside	clean	outside	clean	clean	No children in factory.
"	"	"	"	"	"	clean	No children in factory.
no	.....	"	"	"	"	clean	Poorly ventilated quarters. Children in factory.
yes	clean	"	"	"	"	not clean	Local women only.
"	"	"	"	"	"	clean	
no	.....	outside	dirty	outside	dirty	"	Children in factory. Quarters reasonably clean and adequate.
"	.....		fairly		fairly	"	No children in factory.
		outside	clean	outside	clean		Quarters reasonably clean.
yes	clean	outside	clean	outside	clean	"	Quarters poorly ventilated. No children in factory.
"	"	Inside	clean	Inside	clean	"	Conditions excellent.
"	"	outside	dirty	outside	clean	"	Quarters poorly lighted and ventilated. Water 80 feet away.
"	"	outside	clean	"	"	"	Local women only.
"	"	Inside	clean	Inside	clean	"	" " "
"	"	outside	clean	outside	clean	"	" " "
"	"	Inside	clean	Inside	clean	"	No children in factory.
no	.....	outside	dirty	outside	dirty	"	Quarters poorly ventilated.
yes	clean	outside	clean	outside	clean	"	Local women only.
"	"	Inside	clean	Inside	clean	"	" " "
"	"	outside	clean	outside	clean	"	" " "
"	"	Inside	clean	Inside	clean	fairly clean	No children in factory.
no	.....	outside	clean	outside	clean	clean	Local women only.
yes	clean	"	"	"	"	"	" " "
"	"	Inside	clean	inside	clean	"	No children in factory.
"	"	"	"	"	"	"	Local women only.
no	.....	none	.....	none	.....	"	" " "
yes	clean	outside	clean	outside	clean	"	Quarters good.
no	.....		fairly	outside	dirty	not	
		outside	clean			clean	Quarters fair.
yes	clean	outside	clean	outside	clean	clean	No children in factory.
no	.....	"	"	outside	dirty	"	Local women only.

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TABLE 9.—SHOWING CONDITIONS IN CANNING FACTORIES AFFECT

OWNER.	LOCATION.	Approximate number white women.	Approximate number colored women.	Approximate number Italian women.	WASH ROOMS MEN.	
					Provided.	Condition.
Shimp & Harris	Canton	60	.....	.....	no	.....
Smith Canning Co.	Elmer	30	.....	40	"	.....
Luke F. Smith	Salem	.....	.....	.....	"	.....
Soper & Co.	Farmingdale	10	.....	.....	.....	.....
South Jersey Canning Co.	Pedricktown	30	.....	30	no	.....
Stathem, Cosier & Co.	Newport	30	.....	45	yes	clean
Stevens Brothers	Cedarville	40	.....	.....	no	.....
Stevens Brothers	El Dora	40	.....	.....	"	.....
Stevens Brothers	Goshen	40	.....	.....	yes	clean
Stevens Brothers	Cape May	30	.....	.....	no	.....
George W. Stevens	El Dora	8	.....	.....	"	.....
Louis Vecchi	Haslet	.....	.....	.....	yes	clean
Vesuvian Preserving Co.	Vineland	.....	.....	75	"	"
Watson Brothers	Greenwich	30	50	60	no	.....
George Watson	Yorktown	10	25	.....	"	.....
J. S. Watson	Aldine	15	.....	.....	"	.....
George D. Worthley	Matawan	20	20	.....	"	.....
Montclair Jam Kitchen	Montclair	8	.....	.....	.....	.....
George Roncoroni	Daretown	.....	.....	5	no	.....
Salem Supply Co.	South Dennis	20	.....	20	"	.....

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ING EMPLOYEES.—*Continued.*

Wash Rooms Women.		Toilets. Men.		Toilets. Women.			
Provided.	Condition.	Location.	Condition.	Location.	Condition.	Clothing. Women.	Remarks.
no	.....	outside	dirty	outside	fairly clean	clean	Local women only.
yes	clean	outside	clean	outside	clean	"	No children in factory.
"	"	outside	dirty	"	"	"	
"	"	outside	clean	"	"	"	Local women only.
no	.....	outside	dirty	outside	dirty	not clean	Children in factory.
yes	clean	outside	clean	outside	clean	clean	
"	"	"	"	"	"	"	No children in factory.
no	.....	"	"	"	"	"	" " " "
yes	clean	"	"	"	"	"	" " " "
no	.....	"	"	"	"	"	" " " "
"	.....	"	"	"	"	"	Local women only.
.....	.....	"	"	none	.....	.....	No women employed.
yes	clean	outside	clean	inside	clean	clean	No children in factory.
no	.....	outside	dirty	outside	fairly clean	"	" " " "
"	.....	none	.....	outside	fairly clean	not clean	" " " "
"	.....	outside	dirty	outside	dirty	clean	" " " "
yes	clean	"	"	"	"	fairly clean	" " " "
.....	.....	.....	.....	.....	.....		Local women only.
no	.....	outside	dirty	outside	dirty	fairly clean	Quarters poorly lighted and ventilated.
yes	dirty	"	"	"	"	clean	Italian quarters. Children in wash room.

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One of the greatest difficulties to the canner who does not attempt to utilize the tomato trimmings for the manufacture of pulp, paste or soup stock is a satisfactory way of disposing of wastes. In past years it has been customary to allow solid wastes to accumulate the entire year and be removed at the end of the season to the fields. This practice causes the surroundings of the factory to become offensive. This year the canners have been required to remove wastes daily. Three methods of removing this have been used in the various factories, depending upon their location or upon the value placed upon the wastes. Certain factories located upon tidal streams convey the entire waste into the stream. Other canners, whose factories are located near small streams or in places where liquids may seep away to the fields or swamps, pass the wastes through a rubbing machine. This reduces the solid matter to be carted to the fields to a small volume and the pulp material is carried away by waste water. In other cases the entire waste material is carted away to the fields.

Article 17 provides that empoyees must be cleanly in their habits and must provide themselves with suitable garments which can be kept clean. Many canners have provided their employees with aprons of oil cloth or rubber which can be kept clean. In other factories burlap sacks or other materials which are liable to become sour with tomato juice are worn as aprons. At a comparatively small expense canners can supply the peelers with aprons impervious to water and tomato juice, which can be kept clean easily and which will also keep the clothing of the women dry and clean.

One instance was discovered in which canned goods, which showed spoilage, were reprocessed. A lot of canned salmon consisting of one hundred and forty-eight dozen cans were shipped by a wholesale merchant in New York City to a canning factory in New Jersey. These cans were pierced along the seam to allow the escape of gas and then reprocessed. Upon examination this salmon was found to be unfit for food purposes. The entire lot of salmon was condemned and destroyed.

COLD STORAGE WAREHOUSES.

During the past year one hundred and seventy-four inspections have been made of cold storage warehouses in this State. A large

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proportion of these inspections have been made in Jersey City and Newark, where the large warehouses are located. Two of these public warehouses store all foods excepting fresh fish and broken eggs.

As a result of the work it may be of interest to review the conditions of the warehouses and the general practices carried on in them in relation to the Cold Storage Act of New Jersey. In many cases the law meets the conditions while in certain other particulars changes seem advisable in the law.

As a result of our inspections only two cases in which foods have not been marked or stamped with the dates of entrance into storage have been found. One of these cases was an oversight as the foods were immediately stamped with the dates of entrance into storage from records of these dates held in the office of the company with whom they were stored. In the other case fish were stored loosely in piles with no method of dating. The Board sent an order to this company requiring that a method of dating the fish be adopted and that the fish be dated in some way. In reply to this order a letter was received stating that such a method had been adopted. Upon a subsequent inspection it has been found that no method of dating had been adopted. This matter has been referred to the State Board of Health. In general, however, it might be said that the warehousemen do use care in stamping the dates of entrance into storage upon the article itself, upon the containers, or upon the tags.

It is also evident that, in general, the warehousemen use care in requiring that foods be enclosed in containers sufficiently strong and tight to prevent injury in careless handling. This is natural as they are responsible for goods held in their possession. In one case frozen egg in cans was found in large quantities, having no covers or with covers so loosely fitted that dust and dirt could accumulate upon the surface of the egg. This warehouse now refuses to store egg unless well protected.

During the past year an improvement has been made in the method of handling fresh meats in one of the warehouses storing large quantities of beef, veal and mutton. Formerly it had been placed upon the floor in piles. Now large double racks have been built which are provided with hooks upon which the meats are hung. This method seems to keep the meat in a clean condition

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and economizes space in the warehouse. The dates are generally placed upon tags which are wired to the carcasses.

Fresh fish are stored in large quantities in three warehouses in this State. In two of these warehouses a satisfactory method of storing fish has been adopted. This method consists in washing and freezing the fish. They are then dipped into vats of water in order to freeze a thin coating of ice upon the surface. Following this the fish are placed in wooden boxes which are easily stamped with the dates of entrance into storage.

At present laws regulating the cold storage industry have been adopted in Illinois, Indiana, New York and Massachusetts, where the largest cold storage warehouses are located from which foods are transferred to warehouses in this State. In each of these places it is required that all foods bear the dates of entrance into storage. Consequently, a much smaller proportion of goods which have been in storage outside of the State are transferred to warehouses in this State without the original date of entrance into storage. However, one of the greatest difficulties in connection with the enforcement of the law arises over the fact that the Attorney General holds that goods may be held ten months in warehouses in this State regardless of time held in warehouses in other states. At the same time one of the provisions of the law prohibits the transfer of any food from one cold storage or refrigerating warehouse to another for the purpose of evading any provisions of the act. It has already been found that goods have been transferred from warehouses in New York State to warehouses in New Jersey, with the result that goods may be held in cold storage warehouses for periods in excess of the limits placed by these states without interference on the part of either State. At the same time reasonable excuses may be given by the owners of such goods for such a transfer.

In accordance with the provision of section six of the Cold Storage Law, quarterly reports of the amounts and kinds of food held in storage have been made by the warehouse men in the State. Figures compiled from the reports submitted July 1st, 1911, and October 1st, 1911, are tabulated in order that a comparison may be made with the volume of business at a corresponding time in 1912.

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TABLE 10.—ARTICLES OF FOOD HELD IN COLD STORAGE.

Article.	*Reported as*	*Jan. 1st, 1912*	*Apr. 1st, 1912*	*July 1st, 1911*	*July 1st, 1912*	*Oct. 1st, 1911*	*Oct. 1st, 1912*
Eggs	Dozens	4,135,560	9,180	21,759,430	22,057,290	24,825,916	21,435,480
Eggs, broken	Pounds	166,359	10,050	9,960	42,690	14,160	193,120
Butter	"	1,605,270	490,985	3,983,265	4,114,874	4,321,494	6,465,385
Cheese	"	54,520	14,729	107,727	75,209	139,824	595,528
Poultry	"	3,195,487	4,372,926	2,012,210	3,521,708	1,007,666	1,510,422
Meat, fresh	"	2,145,321	3,197,831	981,652	2,400,783	323,459	1,518,551
Meat, salt	"	31,803	792,452	503,200	125,414	751308	90,003
Fish, fresh	"	45,805	84,394	805,500	640,168	1,279,190	1,101,624
Fish, smoked	"	.....	.....	220,705	1,319	226,811	3,097
Fruits, dried	"	2,901	3,300	354,625	226,226	171,191	114,720
Nuts	"	.....	.....	307,589	98,541	217,922	93,783
Fruits, green	Packages	322,158	102,219	6,097	2,631	50,545	112,677
Vegetables, green	"	74	56,600	2,170	334	1,262	633
Miscellaneous	"	3,708	6,160	9,617	2,961	8,131	7,497

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From the comparison of the figures of July 1st, 1911, and July 1st, 1912, and of the figures of October 1st, 1911, and October 1st, 1912, it is learned that the amount of staple articles of food as eggs, butter, poultry and fresh meats stored in warehouses in this State in 1912 is much greater than in 1911. In the case of other food materials the amounts stored in 1912 has decreased in certain cases and increased in others caused by the market conditions.

In the storage of enormous quantities of perishable food materials it is of interest to know the extent and the kinds of foods found in a state of decomposition or putrefaction. Those foods which are frequently prepared under uncleanly conditions and which putrefy rapidly at ordinary temperatures may be delivered at the warehouses in questionable condition. Fresh fish and egg material stored in cans holding from thirty to one hundred pounds each are most liable to be found in a state of decomposition or putrefaction.

Eggs are frequently sorted at the large warehouses in the northern part of the State, upon arrival from the west, for the purpose of removing those which are broken or cracked in transit. These cracked eggs are either sold to bakeries in the shell or in a frozen condition after removal from the shell.

During the year condemnations have been made of approximately fifteen hundred pounds of frozen egg material, owned by the Excelsior Baking Co., and prepared in New York City and Jersey City. This egg material was denatured and destroyed. Fish intended for bait, in a condition unfit for food purposes, was found stored loosely in a room with fish intended for food purposes. This fish intended for bait was removed from the room in which fish intended for food purposes was stored by the company, upon order from the State Board of Health.

Several requests for an extension of time of storage have been received during the year, upon poultry, butter, dried milk, fish and eggs. In most cases the reason given for the desired extension was the failure to dispose of the holdings, because of the market conditions. Whenever such reasons have been given, these requests have been refused. Extension of storage has been granted upon lots of butter stored by the United States Navy Department, and upon a lot of frozen egg in the custody of the United States Marshal. Another request was granted to a firm which was unable to handle perishable goods in their retail market because of a fire.

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It is recommended that the Legislature be requested to modify the Cold Storage Act in several particulars. Much more valuable information would be secured by the Board if the reports now required to be made quarterly were made monthly, and it is not believed that much additional labor would be imposed upon the warehousemen. It is, therefore, recommended that this change be made.

The plan of marking goods with the date of entrance into cold storage should be supplemented by a requirement compelling the marking of the date of removal, and a prohibition against the removal, altering or defacing of such marks should be provided.

A provision such as is contained in the Indiana law, requiring the declaration of the fact that foods have been in cold storage when such are sold at retail should be added. It is known that eggs, which have been in storage for six or eight months, are frequently sold for strictly fresh eggs after being candled, at which time the rotten and spot eggs are removed. It is also known that hotel proprietors at seashore resorts represent fish received from cold storage warehouses as fresh fish caught along the immediate coast the day served.

A provision requiring that all persons operating cold storage warehouses should secure a license to operate the same, and fixing a reasonable annual license fee, should also be added.

The present penalty section, which is cumbersome and probably so defective as to nullify the entire act, should be corrected, and proper penalties should be provided for violations of the rules adopted under the act.

INSPECTION OF SLAUGHTER HOUSES.

The law regulating the operation of slaughter houses, (Chapter 295 of the Laws of 1910), has now been in force nearly three years. Soon after its passage in 1910, the inspection of these places was begun by inspectors of food and drugs, and continued by them until the present slaughter house inspector, who is a competent veterinarian, was appointed in 1911. The Annual Report of 1911 shows that considerable progress had been made at the time the Report was prepared, in inspecting the slaughter houses in this state and in correcting the numerous defects which were found in almost every place investigated. During the present year, all of the slaugh-

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ter houses in the state, with the exception of three under Federal Inspection, have been inspected. A large number of these have been inspected two or more times, and recommendations have been made to the operators of almost all of them to make changes, either in construction or management, in order that they might comply with the law. Unfortunately, not as much progress has been made in the cleaning up of the slaughter houses as could be desired, because of the smallness of our force. It is not possible for one man to visit all of them frequently enough to keep them in good condition. Many of our slaughter houses need visiting at least once a month, in order that the operators will not lapse into their previous habits of carelessness and uncleanliness.

It is believed that substantially all the slaughter houses in the state have now been located, and a list of these is given in Table 11, which follows:

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TABLE 11.—SHOWING LOCATION AND CONDITION OF SLAUGHTER HOUSES.

LOCATION.	NAME OF OPERATOR.	No. Inspections.	CONDITION		License Granted.	Time Extended.	License Refused.	License Revoked.
			First Inspection.	Last Inspection				
Atlantic County—								
Atlantic City	Jesse Taylor Sons Co.	2	bad	good	yes	...	...	...
Egg Harbor City	Geo. Obergfeld	0	....	....	...	...	...	...
" " "	Wm. Obergfeld	0	....	....	...	...	...	...
" " "	Fred Schevenger	0	....	....	...	...	...	...
Folsom	Jacob Eckhardt	1	bad	....	...	...	...	...
Hammonton	Rocco Rubertone	1	"	....	...	...	...	...
"	Jos. Russo	1	fair	....	...	...	...	...
Bergen County—								
Fairlawn	Samuel Berkman	1	bad	....	...	...	...	...
Hackensack	A. L. Lens	1	"	....	...	...	...	...
Lodi	Henry Van Schke	1	"	....	...	...	yes	...
Tenafly	Samuel Salbin	1	good	....	yes	...	...	...
Burlington County—								
Bordentown	Allan Shinn	1	bad	....	...	...	...	...
"	Walter Warner	2	fair	bad	...	...	yes	...
Bridgeboro	Wm. F. Kanderer	0	....	....	yes	...	...	...
Burlington	Francis S. Banks	1	bad	....	...	...	...	...
Columbus	Robert D. Kerlin	1	"	....	...	...	...	...
"	Albert Price	3	"	bad	...	yes	...	...
"	Chas. Schreiber	1	fair	....	...	...	...	...
Cookstown	W. L. Stevens	2	bad	fair	...	yes	...	...
Crosswicks	Zedekiah McCabe	2	"	bad	...	"	...	...
"	Willett Satterthwaite	2	"	fair	...	"	...	...
Florence	Charles Smith	1	"	....	...	...	...	...
Lewistown	Louis Mantel	2	"	bad	...	...	yes	...
Marlton	Wilmer Bell	1	"	....	...	...	...	...
"	John Lieberman	1	"	....	...	...	...	...
Medford	Robert Henderson	1	good	....	yes	...	...	...
"	Samuel L Lamb	1	bad	....	...	...	...	...
"	Harry Reeve	1	"	....	...	...	...	...
Mount Holly	John Jobs	2	"	good	yes	...	...	...
" "	John Worth	1	good	....	yes	...	...	...
Pemberton	Henry Mantel	2	bad	bad	...	yes	...	...
Riverside	Jacob Lusch	1	fair	....	...	...	...	...
"	Wm. Sarstadt	1	bad	....	...	...	...	...
Vincentown	Geo. R. Abrams	1	good	....	yes	...	...	...
"	Eugene C. Haines	1	fair	....	...	...	...	...
Camden County—								
Berlin	J. F. Henderson	1	bad	....	...	...	...	...
Camden	Fred Banzhoff	0	....	....	yes	...	...	...
"	D. D. Holms	0	....	....	"	...	...	...
"	Leonard Hoffman	1	fair	....	...	...	...	...
"	Schofer & Zink	0	....	....	yes	...	...	...
Kirkwood	Raymond Henderson	1	good	....	"	...	...	...
Grenloch	E. G. Firth	1	bad	....	...	...	...	...
Haddonfield	I. Ellis & Son	1	good	....	yes	...	...	...
Lindenwold	Wm. C. Cammer	1	bad	....	...	...	...	...
"	Henry Steubing	1	fair	....	...	...	...	...
Cape May County—								
Bennett	John B. McPherson	1	fair	....	...	...	...	...
Cape May Court House	J. S. Willis	1	bad	....	...	...	...	...
Erma	F. E. Platt	1	fair	....	...	...	...	...
Rio Grande	Warren M. Harris	1	"	....	...	...	...	...
" "	William Harris	1	"	....	...	...	...	...
Woodbine	Woodbine Beef Co.	1	bad	....	...	...	...	...

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TABLE 11.—SHOWING LOCATION AND CONDITION OF SLAUGHTER HOUSES—*Continued.*

LOCATION.	NAME OF OPERATOR.	No. Inspections.	CONDITION		License Granted.	Time Extended.	License Refused.	License Revoked.
			First Inspection.	Last Inspection.				
Cumberland County—								
Bridgeton	John J. Dixon	1	bad	....	...	...	...	...
"	Fisher Brothers	1	"	....	...	...	...	...
"	Oscar L. Hitchner	1	fair	....	...	...	...	...
"	W. L. Silverman	1	bad	....	...	...	...	...
"	Leslie Souder	2	"	bad	...	yes	...	...
"	Chas. Weber	1	"	....	...	...	...	...
Carmel	Harry Cotlar	1	"	....	...	...	...	...
"	Hyman Cotlar	1	"	....	...	...	...	...
Deerfield	Thomas M. Tice	1	fair	....	...	yes	...	...
Greenwich	Andrew Wheaton	1	"	....	...	...	...	...
Mauricetown	Theodore Fisher	1	"	....	...	...	...	...
"	Abram L. Nichols	1	bad	....	...	...	...	...
Millville	Valentine Schlacter	0	....	....	yes	...	...	...
"	Whitall-Tatum Co.	0	....	....	"	...	...	...
North Vineland	Wm. Shoemaker	1	bad	....	...	...	...	...
Shiloh	Wayde G. Allen	1	fair	....	...	...	...	...
Vineland	Marshall & Croseman	1	bad	....	...	...	...	...
Essex County—								
Caldwell	Chris Sengling	0	....	....	yes	...	...	...
Newark	Beck & Canfield	0	....	....	"	...	...	...
"	John Englehorn	0	....	....	"	...	...	..
"	Simon Hauser & Son	1	bad	....	...	...	...	...
"	Emil Kohn	1	good	....	yes	...	...	...
"	Maybaum & Sons	1	fair	....	"	...	...	...
"	Schloss, Held & Schloss	1	"	....	"	...	...	...
"	Swift & Co.	0	....	....	"	...	...	...
Watchung	John Burnett	1	fair	....	...	...	...	...
Gloucester County—								
Bridgeport	H. McGlincy	1	bad	....	...	...	...	...
Clayton	Harmon Nathan	1	"	....	...	...	...	...
Ewan	Benjamin Carr	1	fair	....	...	...	...	..
Harrisonville	John W. Riley	1	good	....	yes	...	...	...
Mullica Hill	Wilmer DuBois	1	bad	....	...	...	...	...
Paulsboro	Jos. Bailey	1	"	....	...	...	...	...
Sewell	Raymond H. Berry	1	"	....	...	...	yes	...
Sewell	Oscar Carter	1	good	....	yes	...	...	...
National Park	Lentz Bros.	1	"	....	"	...	...	...
Swedesboro	Theo. B. Hurff	1	bad	....	...	...	...	...
Williamstown	Mrs. Jacob Suter	1	fair	....	...	...	...	...
Hudson County—								
Kearny	Bimbler & VanWagenen.	0	....	....	yes	...	...	...
Secaucus	Chas. Miller & Co.	0	....	....	"	...	...	...
Hunterdon County—								
Bloomsbury	James C. Hummor	1	bad	....	...	...	...	...
Califon	Samuel R. Neigh	0	....	....	..	yes	...	..
Clinton	J. V. Aller	1	fair	....	...	...	...	...
"	S. G. Lunger	1	"	....	...	...	...	...
Everittstown	Harry Warner	1	good	....	yes	...	...	...
Frenchtown	L. M. Hoffman	1	"	....	"	...	...	...
"	Wm. P. Loper	1	bad	....	...	...	...	...
"	S. Frank Opdyke	1	good	....	yes	...	...	...
Hampton	Jacob S. Alpaugh	1	bad	....	...	...	...	..
Riegelsville	Chas. Ulmer	1	"	....	...	...	...	..
Lambertville	Hull & Beach	0	....	....	yes	...	...	...
Lebannon	Harry R. Lambert	1	fair	....	...	...	...	..
Milford	Elmer T. Culver	1	good	....	yes	...	...	...

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TABLE 11.—SHOWING LOCATION AND CONDITION OF SLAUGHTER HOUSES—*Continued.*

LOCATION.	NAME OF OPERATOR.	No. Inspections.	CONDITION		License Granted.	Time Extended.	License Refused.	License Revoked.
			First Inspection.	Last Inspection.				
Mount Pleasant	Robbins & Hoppock	1	fair	....	....	yes	....	....
Pattenberg	J. S. Gano	1	good	....	yes	....	....	....
Pittstown	S. R. Reed	1	fair	....	....	....	....	....
Ringoes	Wm. Hartpence	1	"	....	....	....	....	....
"	R. H. Hill	1	"	....	....	....	....	....
Sergeantsville	J. J. Rittenhouse	1	good	....	yes	....	....	....
Stockton	Wm. Durlin	1	"	....	"	....	....	....
Mercer County—								
Hightstown	W. F. Dilatush	2	bad	bad	....	....	yes	....
"	W. W. Parks	2	"	"	....	....	"	....
Hopewell	Andrew Wyckoff	2	"	fair	....	yes	....	....
Pennington	Geo. Atwood	3	"	good	yes	....	....	....
Princeton	Wm. H. Hahn	1	"	....	....	....	....	....
Trenton	S. Wesley Armstrong	4	good	fair	yes	....	....	....
"	Jos. Berger	12	bad	bad	....	....	yes	....
"	August Brodbeck	5	fair	good	yes	....	....	....
"	Domini Cesare	1	bad	....	....	....	....	....
"	Wm. Dabelstein	4	fair	good	yes	....	....	....
"	Goldsmith & Stein	7	bad	bad	....	....	yes	....
"	Jacob L. Kafes	3	bad	good	yes	....	....	....
"	John Hartsman	0	fair	fair	yes	yes	....	....
"	A. Horowitz	3	"	good	"	....	....	....
"	Fred Ketterer's Sons	8	fair	good	yes	....	....	....
"	Israel Meltzer	5	"	"	"	....	....	....
"	Fred Neuner	4	"	"	"	....	....	....
"	Chas. S. Parker	2	bad	"	"	....	....	....
"	Samuel Rosenthal	14	"	"	"	....	....	....
"	Chas. Wagner	3	"	"	"	....	....	....
"	Gustave Wagner	4	"	"	"	....	....	....
"	Wagner & Myers	3	"	"	"	....	....	....
"	Fred Weckerlin	10	"	"	"	....	....	....
Windsor	Wm. A. Girton	2	"	"	"	....	....	....
Middlesex County—								
Cranbury	Chas. W. Stout	2	"	bad	....	....	yes	....
"	E. C. Wilson	2	"	fair	....	yes	....	....
Jamesburg	C. Mount	1	"	....	....	....	....	....
Milltown	Wm. Glock	1	"	....	....	....	....	....
"	Martin Miller	1	"	....	....	....	....	....
Monmouth Junc.	Wm. VanDyke	0	....	....	yes	....	....	....
New Brunswick	Samuel Lederer & Son	1	good	....	"	....	....	....
Perth Amboy	Max Fogel	1	"	....	"	....	....	....
" "	Abraham Wertheim	3	"	good	"	....	....	....
Spottswood	Jos. Hodapp	1	bad	....	....	....	....	....
"	Michael Nisinhoff	1	good	....	yes	....	....	....
Monmouth County—								
Allentown	J. H. Pierce	1	bad	....	....	....	....	....
Asbury Park	Asher White	1	good	....	yes	....	....	....
Belmar	Samuel Silverstein	1	"	....	"	....	....	....
Eatontown	Joseph Miller	1	"	....	"	....	....	....
Englishtown	Clayton Palmer	1	"	....	"	....	....	....
"	David R. Richmond	2	bad	good	"	....	....	....
Freehold	Jos. Ruda	1	"	....	....	....	....	....
"	Sagotsky Bros.	5	fair	good	yes	....	....	....
"	Zlotkin & Berkowitz	3	"	"	"	....	....	....
"	William Southard	1	bad	....	....	....	....	....
Howell	David Errickson	1	"	....	....	....	....	....
Matawan	Frank Linzmayer	1	fair	....	....	yes	....	....
Oceanport	L. Shapiro	2	good	good	yes	....	....	....

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TABLE 11.—SHOWING LOCATION AND CONDITION OF SLAUGHTER HOUSES—*Continued.*

LOCATION.	NAME OF OPERATOR.	No. Inspections.	CONDITION		License Granted.	Time Extended.	License Refused.	License Revoked.
			First Inspection.	Last Inspection.				
Red Bank	Iravonia Bennett	1	fair	....	...	...	...	...
Shrewsbury	Frank Marx	1	good	....	yes	...	...	...
Tennett	Samuel Zlotkin	0	....	....	"	...	...	...
Tinton Falls	Harry Coleman	1	bad	....	...	...	...	...
" "	Albert Crawford	1	"	....	...	...	...	...
Morris County—								
Dover	John B. Richards	1	"	....	...	...	...	...
Flanders	Harry Read	1	"	....	...	...	...	...
German Valley	Bert Fleming	1	"	....	...	...	...	..
" "	Geo. Lance	1	"	....	...	...	...	...
Green Village	John Weber	1	"	....	...	...	...	...
Mendham	Chas. H. Day	1	fair	....	...	yes	...	...
Morristown	Wm. Howlett	1	bad	....	...	...	yes	...
"	Samuel Smith	1	"	....	...	...	"	...
Riverdale	Gus Breslauer	1	"	....	...	...	...	...
Stirling	J. Hahn	1	"	....	...	...	...	...
"	J. M. Holmes	1	"	....	...	...	...	...
Ocean County—								
New Egypt	Elmer Errickson	1	"	....	...	...	...	...
" "	Mantel Brothers	1	"	....	...	...	...	...
" "	Samuel Robbins	1	"	....	...	...	...	...
Passaic County—								
Hawthorne	Wm. A. Steiginga	1	"	....	...	...	...	...
Little Falls	Franco-American Poultry Co.	1	fair	....	...	...	...	...
Passaic	Jos. Feld	1	good	....	yes	...	...	...
Paterson	D. Fullerton Co.	0	....	....	"	...	...	...
"	Paul Mazey	0	....	....	"	...	...	...
"	Henry Muhs	0	....	....	"	...	...	...
Totowa	Max Levenstein	1	bad	....	...	...	...	..
Salem County—								
Alliance	Isaac Steinsnyder	1	bad	....	...	...	...	...
Alloway	John W. Dunham	1	fair	....	...	...	...	...
Elmer	Abraham Bolinck	2	bad	bad	...	yes	...	..
"	Jacob Levine	2	"	fair	...	yes	...	...
Alloway Junction	Lewis Krechmer	2	"	"	...	"	...	...
Monroeville	Eugene MacFarland	2	"	"	...	"	...	...
Norma	Lewis Fisher	1	"	....	...	...	...	...
Salem	Robert Breslin	2	"	bad	..	..	yes	...
"	Bonhan & Young	2	"	"	...	yes	...	...
"	Wm. Burkhart	1	good	....	yes	...	...	...
"	A. L. Fox	2	bad	fair	...	yes	...	...
"	J. S. Stretch	2	"	"	...	"	...	...
"	Richard Waddington	1	"	....	...	...	...	...
Sharptown	H. H. Rook	1	"	....	...	...	...	...
Woodstown	Dixon & Montrief	2	"	bad	...	...	yes	...
Somerset County—								
Belle Mead	Edgar Kane	1	"	....	...	...	...	...
" "	H. Fransberger	1	"	....	...	...	...	...
Martinsville	Frederick W. Dealman	1	"	....	...	...	...	...
"	John F. Monday	1	good	....	yes	...	...	...
"	John Van Nest	1	"	....	"	...	...	...
North Branch	Frank C. Williams	1	bad	....	...	...	...	...
Peapack	Chas. Ludlow	1	"	....	...	...	...	..
Somerville	Geo. Anton	1	fair	....	...	yes	...	...
"	Edward Kingsley	1	good	....	yes	...	...	...
Warrenville	Geo. Dealaman	1	bad	....	...	...	...	...

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TABLE 11.—SHOWING LOCATION AND CONDITION OF SLAUGHTER HOUSES—*Continued.*

LOCATION.	NAME OF OPERATOR.	No. Inspections.	CONDITION		License Granted.	Time Extended.	License Refused.	License Revoked.
			First Inspection.	Last Inspection.				
Sussex County—								
Andover	Andrew R. Dobbins	1	good	....	yes	...	...	...
"	W. K. Longcor	1	bad	....	...	...	yes	...
Branchville	John A. Johnson	1	good	....	yes	...	...	...
"	M. H. Reed	1	"	....	"	...	...	...
Glenwood	Wm. Forshee	2	"	bad	...	...	...	yes
Hamburg	Geo. Mills	1	bad	"	...	...	yes	...
"	Harry Reed	1	"	....	...	...	"	...
Huntsville	A. Hull	1	"	....	...	...	...	...
Lafayette	Frank Lockburner	1	good	....	yes	...	...	...
"	F. M. Pellett	1	"	....	"	...	...	...
"	Henry Wernlein	1	"	....	"	...	...	...
McAfee	Chas. B. Sammis	2	bad	good	"	...	...	...
Newton	Casper Grover							
"	Irving P. Kishpaugh	1	"	....	...	...	yes	...
"	Losey Brothers	1	"	....	...	...	...	...
"	Obediah Scott	1	"	....	...	...	...	...
"	William Vickery	1	"	....	...	...	...	...
Quarryville	M. S. Rogers	2	fair	good	yes	...	...	...
Sussex	John Bedell	2	"		"	...	...	...
"	Lawrence P. Johnson	1	bad	....	...	...	...	...
"	Wm. H. Johnson	2	fair	bad	...	...	yes	...
"	Jacob Martin	1	good	....	yes	...	...	...
Tranquility	Geo. W. Lewis	1	"	....	"	...	...	...
Union County—								
Elizabeth	Max Charles	1	bad	....	...	...	...	...
"	Chas. Feldman	1	"	....	...	...	...	...
Linden	Cohen & Berman	0	....	....	yes	...	...	...
Plainfield	R. W. Gibson	1	bad	....	...	...	yes	...
Rahway	F. & A. Ritter	2	"	fair	...	yes	...	...
Roselle Park	John C. Bender	2	"	bad	...	"	...	...
" "	John Keeler	2	"	"	...	"	...	...
Warren County—								
Asbury	James Riddle	2	"	good	yes	...	...	...
"	Edgar Smith	2	"	fair	...	yes	...	...
Belvidere	Hiram R. Richards	1	"	....	...	"	...	...
Blairstown	John C. Brands	1	"	....	...	...	...	...
"	Myron C. Hartman	1	"	....	...	...	yes	...
"	Lester Huff	1	fair	....	...	yes	...	...
Buttzville	John S. Folkner	1	bad	....	...	...	...	...
Columbia	Frank Brands	1	"	....	...	...	...	...
Hackettstown	Geo. Heuber	1	"	....	...	...	...	...
"	Klotz & Ackley	1	fair	....	..	yes	...	...
"	Rice & Deremer	1	fair	....	..	yes	...	...
"	Geo. Rodda	1	bad	....	..	...	...	...
Hainesburg	Brands & Rice	1	good	....	yes	...	...	...
"	Snover & Rice	1	bad	....	...	...	...	...
Hope	Chas. Westbrook	1	fair	....	...	yes	...	...
Marksboro	John Kishpaugh	1	bad	....	...	...	yes	...
"	Edward Rice	1	"	....	...	...	"	...
New Village	Joseph Paina	1	good	....	yes	...	...	...
Phillipsburg	Wilson Kroner	1	fair	....	...	...	...	...
Stewartsville	Frank B. Bailey	1	bad	....	...	...	...	...
Vienna	John Lamosson	1	"	....	...	...	...	...
"	Lewis E. Merrill	1	"	....	...	...	...	...
"	Edward Morgan	1	"	....	...	...	...	...
Washington	Hance Brothers	1	good	....	yes	...	...	...
"	Wm. Mowder	2	bad	bad	...	...	yes	...
"	Clark Shafer & Sons	2	good	good	yes	...	...	...

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A summary of the above Table, showing in a concise form what has been done during the year, as stated in Table 12, follows:

TABLE 12.—SHOWING THE NUMBER OF INSPECTIONS AND THE CONDITIONS OF SLAUGHTER HOUSES THROUGHOUT THE STATE.

	1911.	1912.
Number found to be in good condition on first inspection...	9	46
Number found to be in fair condition on first inspection....	41	52
Number found to be in bad condition on first inspection....	136	145
Number retired, condition not reported.....	2	103
Total number inspected	195	346
Number not inspected during the year	157	23
Total number on record	352	369
Number of slaughter houses in which changes were recommended	164	243
Number of slaughter houses showing all recommendations complied with upon reinspection	25	28
Reinspections showing recommendations partly complied with	23	20
Licenses granted	36	55

	Slaughter houses.	*Visits.*
No. of slaughter houses inspected once	285	285
No. of slaughter houses inspected twice	41	82
No. of slaughter houses inspected three times	9	27
No. of slaughter houses inspected four times	2	8
No. of slaughter houses inspected five times	5	25
No. of slaughter houses inspected six times	1	6
No. of slaughter houses inspected seven times	1	7
No. of slaughter houses inspected ten times	1	10
No. of slaughter houses inspected twelve times	1	12
No. of slaughter houses inspected fourteen times	1	14
Total	346	476

Total number of slaughter houses which are being operated in this State	266
Total number of slaughter houses which have been granted a license....	92
Total number of slaughter houses which have been refused a license....	23
License revoked	1

Condition of slaughter houses at the time of the last inspection:

Good condition	74
Fair condition	47
Bad condition	122

In 1911, the records of this office showed that there were 352 slaughter houses in this state. Many of these places have now been abandoned, but a considerable number of new ones have been discovered, bringing the number actually operated at the present time up to 266.

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Many of these slaughter houses are located in the rural districts and in inaccessible situations, and the inspection of these requires much time. In fact, the inspection and regulation of the rural slaughter house is the principal difficulty with which we have to contend at present. They are usually small, badly built, imperfectly equipped, and only intended for the slaughter of a few animals. Each one presents a different problem, the solution of which, in a manner calculated to adequately safeguard the quality of the meat prepared therein and at the same time to impose no unnecessary burden on the owner, requires individual treatment, and is frequently a matter of some difficulty. We have, therefore, proceeded, with considerable caution, in requiring structural changes in the buildings, only insisting upon improvements which seem necessary, in order that a clean and healthful product may be produced.

One of the commonest defects in the rural slaughter house is the lack of an adequate water supply. It is obvious that no slaughter house can be properly cleansed if water has to be carried in pails or carted in barrels for any distance, and we have, therefore, insisted that slaughter houses must be equipped either with running water in the killing room or with a pump, immediately outside, to which a hose leading into the killing room can be connected. Almost all the rural slaughter houses are decidedly defective in the disposal of their waste products. In the past, it has been a common practice to throw the offal and other refuse materials to hogs, which have usually been kept in pens immediately adjoining. This results in the production, during the summer months, of an intolerable nuisance, and also in the maintenance of a breeding place for flies. We have, therefore, insisted that hog pens shall not be maintained adjoining slaughter houses, and that offal shall not be fed to hogs, unless it has been previously sterilized and then only to the extent of one-third of the total ration.

Waste liquids were almost always run out on to the ground, unless a stream was conveniently located, in which case the liquid wastes were run into the stream. Both of these methods of disposing of slaughter house wastes, which from their natures are highly putrescible, are very objectionable, and the Board has insisted that these wastes must not be permitted to go into streams, nor will they be permitted to flow over the surface of the ground in such a manner that a nuisance is created. During the past year

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many of these rural slaughter houses have installed cesspools or catch basins, in which the liquid wastes are caught, and from which they are removed from time to time. The feeding of offal to hogs has also been discontinued in a great many places.

During the year many of the slaughter houses in this state have been practically reconstructed; the old and filthy wooden floors have been replaced by concrete; the sidewalls, formerly constructed of wood and permitted to become filthy, have been cleaned and covered with impervious material; additional window space has been provided where necessary, and screens have been installed at doors and windows during the fly season. The old familiar heap of decomposing refuse, so common around country slaughter houses, is disappearing, the refuse either being carted away daily or composted at a point sufficiently distant from the slaughter house to render this process of disposing of it unobjectionable.

It has been found that a large proportion of the persons operating slaughter houses have been entirely willing to comply with the suggestions made to them by the Board, looking toward the improvement of their buildings and their methods of handling food products. There are a few, however, who persistently violate the Slaughter House Act and the Rules of the State Board of Health. These persons have now been given reasonable opportunity to bring their places in compliance with the law and to secure licenses to operate, and the time has now come when further delay on their part should result in the refusal of their applications for licenses and their prosecution for operating without them.

MEAT INSPECTION.

The inspection of the slaughter houses during the present year has made it clear that much meat is slaughtered in this state, and dressed for sale, which is not fit for use as food. New Jersey, for its size, is a large producer of milk, and, therefore, many worn out dairy cows are annually sold to the butchers in this state. Most of the best of these go to slaughter houses where Federal Inspection is maintained, but those which are known or suspected to be diseased, or which are emaciated or injured, or in any other condition which renders them liable to condemnation if inspected, are sold to butchers, who slaughter them without any inspection whatever,

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and dress them for food which is consumed within the state. The practice of our local butchers in this respect varies greatly. Some of them are as careful in the selection of the meat which they offer for sale as are the Federal Inspectors; others will slaughter and dress cows which are fit for nothing but the manufacture of fertilizer.

As is to be expected in the milk producing section, there has been in this state a large traffic in immature calves. The calf is a nuisance to a milk producer, and is sold as soon after birth as possible. During the year, a considerable number of immature calves have been condemned, and suits brought in a number of cases for the sale of calves under the statutory age. This action on the part of the Board has had a salutary effect upon the calf dealers, and the sale of calves under four weeks of age is much less frequent than it was a year ago.

There is no legislation in force in this state which requires the inspection of meat at the time of slaughter. Several cities have adopted ordinances which provide for meat inspection, but the systems of inspection in vogue are not producing efficient results, nor is it to be expected that meat inspection carried on in this manner can ever be thoroughly satisfactory. It is well understood, by those conversant with the subject, that meat inspection, to be efficient, must be made at the time the animal is slaughtered, as is done by the Inspectors of the Bureau of Animal Industry. Some legislation is needed in this state which will secure inspection of this character, but it is difficult to see how it can be accomplished without greatly restricting the number of slaughter houses now in existence. It is believed, however, that ultimately this problem will be solved in this state as it has been in Germany, and, to a lesser extent, in France and England, by the abolition of the small slaughter house and the concentration of slaughtering in large municipal or county slaughter houses where proper facilities for slaughtering and proper inspection can always be maintained, and where the utilization of the by-products, which go to waste to a large extent in the small slaughter house, can be economically accomplished.

The following Table shows certain meat inspections which were made during the year and the results of these inspections. It is to be regretted that our limited force makes it impossible to do more along these lines.

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TABLE 13.—SHOWING POST-MORTEM EXAMINATIONS OF CATTLE, CALVES, AND HOGS DURING THE YEAR.

OWNER.	ADDRESS OF OWNER.	PLACE INSPECTED.	DATE INSPECTED.	CONSIGNEE.	ARTICLE.						Cause for condemnation.	Suit authorized.	Judgment for the State.
					BEEF		VEAL		PORK				
					Inspected.	Condemned.	Inspected.	Condemned.	Inspected.	Condemned.			
John Bedell	Sussex	Jersey City	Nov. 24, 1911	Ortlieb & Co.	..	..	4	4	..	..	Immaturity	yes	pending
Abraham Bolnick	Elmer	Elmer	July 23, 1912	Tony Previto	..	..	3	1	..	..	"	"	yes
Dixon & Moncrief	Woodstown	Woodstown	Jan. 26, 1912		..	..	8	1	..	..	"	no	
Myer Dwartski	New Brunswick,	New Brunswick,	Nov. 8, 1911		2	1	..	..	..	..	Tuberculosis	yes	yes
" "	" "	" "	Nov. 8, 1911		..	..	2	2	..	..	Immaturity	"	"
Williard Forshee	Glenwood	Jersey City	Oct. 15, 1912	Ortlieb & Co.	..	..	12	6	..	..	"	"	pending
Goldsmith & Stein	Trenton	Trenton	Nov. 9, 1911		4	1	..	..	..	..	Tuberculosis	no	
Max Henn	New Brunswick,	New Brunswick,	Dec. 1, 1911		2	1	..	..	..	..	"	yes	non-suit
L. D. Johnson	Sussex	Jersey City	Nov. 22, 1911	Ortlieb & Co.	..	..	2	2	..	..	Immaturity	"	pending
Jacob Katz	Perth Amboy	Perth Amboy	May 8, 1912		1	1	..	..	..	..	Tuberculosis		
Louis Koplowitz	" "	" "	Nov. 3, 1911	Jos. Mintz	..	..	2	2	..	..	Immaturity	yes	yes
Ellis Krechmer	Atlantic City	Alloway Junc.	Apr. 2, 1912	Louis Krechmer	..	..	5	2	..	..	"	"	"
" "	" "	" "	Apr. 2, 1912	" "	2	..	..	..	..	..			
Lewis Krechmer	" "	Atlantic City	July 24, 1912	Mike Mareno	..	..	2	1	..	..	Immaturity	yes	yes
Al. Levine	Trenton	Trenton	Feb. 21, 1912		2	1	..	..	..	..	Tuberculosis		
" "	"	"	Feb. 14, 1912		..	..	4	2	..	..	Immaturity		
Jacob Levine	Elmer	Elmer	Apr. 1, 1912		1	1	..	..	..	..	Tuberculosis		
Henry Mantel	Pemberton	Trenton	May 24, 1912	Wm. Dabelstein	6	1	..	..	..	..	"		
Jacob Martin	Sussex	Jersey City	Nov. 24, 1911	Ortlieb & Co.	..	..	4	1	..	..	Immaturity		
Joseph Mesaros	Newark	Newark	Oct. 25, 1912		2	..	..	..	..	8			
Joseph Mintz	Perth Amboy	Perth Amboy	Nov. 3, 1911		..	..	2	2	..	..	Immaturity	yes	yes
" "	" "	" "	May 8, 1912		..	..	1	1	..	..	"		
Ortlieb & Co.	Jersey City	Jersey City	Oct. 24, 1912		..	..	1	1	..	..	"		
" " "	" "	" "	Oct. 26, 1912		..	..	4	..	..	..			
C. S. Parker	Trenton	Trenton	Jan. 15, 1912		..	..	..	..	..	11			
A. W. Price	Columbus	Roebling	June 19, 1912	Michael Horney	2	1	..	..	..	..	Tuberculosis	yes	yes
A. L. Rice	Lambertville	Lambertville	Feb. 14, 1912		1	..	1	..	4	..			
Salem Supply Co.	Salem	Salem	Jan. 27, 1912		..	..	12	3	..	..			
Chas. Screiber	Columbus	Columbus	June 14, 1912		..	..	2	1	..	..			
S. Wartolowicz	Camden	Camden	Nov. 15, 1911		..	..	1	1	..	..	Immaturity	yes	yes
Abraham Wertheim	Perth Amboy	Perth Amboy	Nov. 2, 1911		..	..	1	1	..	..	"	"	"
Zlotkin & Berkowitz	Freehold	Freehold	July 21, 1912		1	1	..	..	..	..	Tuberculosis	"	pending
" " "	"	"	Aug. 16, 1912		1	1	..	..	..	..	"		
				Totals	27	10	73	34	23	..			

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SHELLFISH.

The Oyster Industry in the State of New Jersey is one of considerable magnitude. Nearly ten thousand persons are employed in it, and the annual value of the output is in the neighborhood of $4,000,000.00. There are over 31,000 acres of leased oyster grounds in the state, for the use of which the State exacts an annual rental of from 50 cents to one dollar per acre, besides unleased areas of considerable size, from which oysters are taken. These oyster grounds extend from Maurice River Cove, at the lower end of the Delaware Bay, all along the Atlantic Coast-Line, in the network of bays and thoroughfares back of the beach, up to and including Sandy Hook Bay, the Kill Von Kull and portions of Newark Bay, a distance of over one hundred and fifty miles. The property of the oystermen on the leased grounds is protected by the various oyster commissions which maintain a system of patrols to prevent poaching and to protect the natural seed grounds by regulating the catching of seed oysters therefrom.

New Jersey is a thickly populated state and many of its streams receive polluting matter in greater or less quantity. It is of course well established that oysters, when placed in waters containing typhoid bacilli, may become infected, and, when eaten, may act as agents for the spread of that disease. It has also been claimed that oysters taken from polluted waters have been the cause of digestive disturbances of a non-typhoid character, but the evidence on this point, while worth considering, is decidedly vague and not particularly convincing.

The State Board of Health has been investigating the quality of the oysters grown in this state for nearly ten years, but the early investigations were necessarily superficial and incomplete, and the results obtained inconclusive because of lack of funds. It was discovered, however, that conditions existed in several parts of the state, and particularly at Maurice River, which were probably prejudicial to the purity of the oysters handled there, and as early as 1903, attempts were made to rectify some of these conditions with partial success. At that time the Board met with considerable opposition from the oystermen who were not then convinced, as they

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are now, that the continuance of their business depends upon the purity of their product.

The Federal Government somewhat later began an extensive investigation into the sanitary aspects of the oyster industry, and several hearings were held by the Board of Food and Drug Inspection of the U. S. Department of Agriculture, at which various aspects of the industry were considered, the earlier hearing being devoted almost entirely to a consideration of the problems relating to the preparation and transportation of shucked oysters. As a result of these hearings, Food and Drug Inspection Decision 110 was promulgated, which provided that floated oysters would be held to be adulterated within the meaning of the Federal Food and Drugs Act.

By the "floating of oysters" is meant the taking of oysters from the grounds on which they are grown, and placing them for a short time, from 12 hours to 1 week or more, depending on the season of the year and upon weather conditions, in water having considerably less salt content than that in which they were grown. Usually this floating is done in tidal streams at points where the water is nearly fresh at the end of the ebb tide. The oyster, when placed in fresh or nearly fresh water "drinks" as the oystermen say. That is, it takes up a considerable amount of water by osmosis, becoming larger in size and firmer in texture, somewhat lighter in color, and loses much of its salty flavor. It also rids itself to a considerable extent of mud or sand which it may have taken into its shell while feeding.

The oystermen give various reasons why floating is practised, but when analyzed, these are reduced to three. The oyster after floating is markedly improved in appearance. It is usually cleaner, and it is stated to keep in good condition in the shell and stand transportation much better than the salt oyster. In my opinion, the main reason why floating is practised is because the appearance, and, therefore, the salability of the product is improved, although the shippers usually insist that this is incidental, and that they float primarily to cleanse their oysters and make them better able to stand transportation.

When Food and Drug Inspection Decision 110 was issued, the oystermen of New Jersey suddenly woke up. Being firmly convinced that their industry would be ruined if they were not permitted to float their oysters, they demanded another hearing by the

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Board of Food and Drug Inspection. This hearing was held, and as a result of the evidence there presented, Food and Drug Inspection Decision 110 was in part rescinded and replaced by Food and Drug Inspection Decision 121, which provided in substance that oysters must not be floated in *polluted waters* nor in waters of a less salt content than that in which oysters will grow to maturity. Inasmuch as oysters will grow to maturity in tidal streams, the waters of which at times are substantially fresh, this decision practically only prohibited the floating of oysters in polluted waters. Theoretically there has never been any difference of opinion between the various authorities enforcing food laws and the oystermen, regarding the floating of oysters in polluted water. The oystermen condemn this practice just as much as any one else. The term "polluted water," however, is one suspectible of various interpretations, and, in practice, it has been found that the oysterman's idea of what constitutes a polluted water is sometimes quite different from that held by sanitary authorities.

With their business menaced by the Federal Government, the oystermen, who had formerly resented interference by the State Board of Health, changed their attitude and asked for help. They wanted to know what they could do to meet the requirements of the Government, and to protect the streams in which their floating was done from pollution. Largely at the instigation of the oystermen, an act was passed by the Legislature in 1910, patterned somewhat after one already in force in Rhode Island, which provided that the State Board should inspect annually or oftener each oyster and clam bed in the state, and issue a certificate, showing the result of such inspection to the owner of the bed. Inasmuch as there are several thousand oyster beds and innumerable clam beds in the state, and inasmuch as the clam beds have no owners, and inasmuch as the Legislature did not make any appropriation for the enforcement of the act, it was soon found that the Board could not possibly comply with its provisions. Moreover, the act was obviously unconstitutional, owing to a defect in its title. The Legislature of 1911 remodeled the act, omitting the requirements for annual inspections of each bed and the issuing of certificates, and extending the power of condemnation, which, in the act of 1910, had applied only to the beds, to the shellfish themselves.

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This act was considerably better than its predecessor, but it still left much to be desired, especially as no appropriation was made for doing the work. In spite of the lack of appropriation, the Board was able in 1910 to make a fairly complete preliminary study of the oyster beds in the Maurice River Cove, the largest and most important oyster growing district in the state. A partial investigation of the Maurice River, in which the oysters were floated, was also made, but sufficient information was not secured at that time to enable any reliable conclusions to be drawn. During the year 1911, the Division of Food and Drugs, which was conducting the oyster investigation, was so occupied with other work that the Maurice River investigation was not continued, but sanitary inspections were made in various other parts of the State, for the purpose of gathering data relating to the pollution of streams in which oysters were grown or floated. The clam industry was also investigated to some extent.

In 1912, the oyster law was again remodeled by the Legislature, the powers of the Board under it increased, and a sufficient appropriation was made to enable the Board to make a start toward investigating conditions throughout the State. This act, as it now stands, is a very satisfactory and sensible piece of legislation. It provides that the Board shall inspect the oyster and clam beds of the state as often as they deem necessary, for the purpose of determining the fitness of the shellfish grown or placed thereon for human food. It gives the Board power to condemn any oyster or clam bed, or other place from which oysters are taken for use as food, which is found to be subject to pollution, or to any other condition which may render the shellfish dangerous to health, and it also gives the Board power to summarily prohibit the sale or distribution of shellfish from such beds. It further provides that no excremental or other polluting matter of any kind or character whatever shall be placed in or on the banks of any stream in which oysters grow or may be placed, making an exception, however, to the sewage of municipalities, the discharge of which into streams is regulated by other acts. It also gives the Board power to make general rules and regulations for the enforcement of the act, and specific orders regarding the growing and handling of shellfish and the disposal of polluting matter which may affect the purity of shellfish.

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Under this act, it became the duty of the Division of Food and Drugs to begin in earnest the investigation of the oyster business in this State. In making this investigation, the two objects were kept prominently in view; first and most important, the protection of the public health, and second, the preservation of an important industry in so far as this was consistent with the sale of a wholesome product.

Our previous investigations had shown that the problem was a difficult one and the investigations necessary to arrive at a thorough understanding of the quality of our oysters would require several years to complete. Considerable difficulty had been experienced in the past in getting samples to the Laboratory in a condition satisfactory for examination, and it was determined to procure a boat equipped with sufficient laboratory facilities to enable preliminary bacteriological work to be done on board. No suitable boat could be found on the market, and it became necessary to have one built. This delayed the beginning of operations to some extent, but in the latter part of August the boat was launched and taken to Maurice River Cove, and a study of conditions in the river from its mouth to Millville, a distance of about 25 miles, was begun and continued for somewhat more than two months. During this period, almost one hundred samples of oysters, floated and salt, and nearly three hundred samples of water were examined bacteriologically.

The Maurice River is a stream flowing into the Maurice River Cove, a branch of the Delaware Bay, and draining a watershed of considerable area (386.4 sq. mi.). From Millville to the mouth it is a tidal stream of considerable size, flowing in a tortuous manner through lowland, much of which is actual marsh, more or less flooded at high tide. Millville, at the head of navigation, is a city of about 12,500 people. The city is partly sewered, the sewage being treated in a disposal plant a short distance below the city. The disposal plant consists of four sedimentation tanks and four contact beds, filled with rather course stone. Septic sewage from the tanks is taken to a distributing house where it is treated with copper sulphate and then discharged onto the contact beds in rotation. From these beds, it goes to a retention chamber which empties into the river at ebb tide. For various reasons, the operation of this plant has never been altogether satisfactory, and the Board has recently

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ordered the Millville authorities to disinfect the effluent with hypochlorite before it enters the river.

Oysters taken from the Cove are laid out in floats located at the towns of Bivalve and Maurice River, about two miles from the mouth of the river. At these points, there are shipping wharves where the oysters are sorted, packed in sacks or barrels, and loaded on the cars for shipment. All oysters are shipped in the shell. About one hundred and twenty oyster boats ply between the beds in the cove and the floats, bringing in oysters, each boat having a crew of from five to six men. A considerable number of men are also employed on the wharves so that the total population of Maurice River and Bivalve (including men on the boats) is not far from one thousand.

Millville, Maurice River and Bivalve are the three principal points contributing polluting matter to the river. There are several small towns between Millville and the mouth, but they are unsewered, and repeated careful inspections by the State Board of Health have resulted in the removal of practically all sources of stream pollutions from them, and there are no important tributaries between Millville and the mouth. There is considerable cultivated land and pasture land along the river, the surface drainage from which the river receives in time of storm.

When our investigations were begun at Maurice River and Bivalve in 1903, conditions at those points were bad. On both sides of the river and extending over the water were shipping houses frequented by large numbers of men. These shipping houses were provided with toilets, at least 30 in number, which emptied directly into the river at high tide. Above and below the shipping houses, near the banks of both sides of the river, were the floats, about 80 in number, in which oysters were constantly placed and over which water from under the shipping houses, heavily polluted by fæcal matter was washed at every tide. On the Bivalve side of the river, just opposite one of the floats and a little below the shipping house, a tidal stream carrying the drainage from a large part of Port Norris, emptied into the river. The river also received polluting matter from the men on the boats, as none of the boats were provided with toilet facilities. The attention of the oystermen was called to these conditions and they have been gradually rectified. All toilets have been removed from the shipping houses and toilet

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facilities provided a safe distance back from the river bank. The stream draining Port Norris was taken out of the river altogether by closing its mouth and digging an artificial channel to a point in the shore of the cove, a considerable distance from the river mouth. A number of small houses occupied by oystermen, which were located on the bank of this stream immediately behind the shipping house on the Bivalve side, were moved back several hundred feet and the low land on which they had previously stood was filled in with cinders by the Central Railroad Company. The local board of health of Commercial Township, in which is located Bivalve and Port Norris, adopted an ordinance providing for the abolition of open privy vaults and requiring tight receptacles in each out-house, which are periodically cleaned and emptied by the city scavenger, and last of all, pursuant to an order issued by the State Board, and taking effect on November 15th, each oyster boat is provided with adequate toilet facilities in the shape of covered metal pails which are collected daily by a scavenger boat, taken ashore, cleansed, disinfected and returned to the boats, so that the pollution of the river and cove by the men working on boats has now practically ceased. The Board has also insisted that the cars furnished by the railroad companies for the transportation of oysters be thoroughly cleansed before they are used for that purpose, and has ruled that only clean sacks and barrels can be used for shipping oysters. The conditions which now exist at Maurice River and Bivalve are such that, so far as can be determined by inspection, practically all direct pollution of the river at these points, by substances likely to impair the wholesomeness of the oysters, has ceased.

The bacteriological examination of water and oysters was limited to presumptive tests for B. coli communis by the standard methods of the American Public Health Association. In addition, the color, turbidity, specific gravity and temperature of the water at various points were noted. The results obtained by these latter determinations, while of interest, do not bear directly on the pollution of the river, and their discussion will be reserved for a subsequent report. Having in mind the large experimental error which always attends bacteriological examinations, it was deemed wise to confine ourselves to the presumptive test for B. coli, using lactose bile, a method of procedure which is simple and not time consuming, as we were thereby enabled to examine much larger numbers of samples than

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would have been the case had attempts been made to carry out the routine tests for B. coli on every sample. The observations of others and our own previous work had shown that about 90% of bile tubes, showing gas to the extent of 10% or more after 48 hours incubation at 37° C, contained B. coli communis. The irregularity of the results, which are shown in the tables that follow, demonstrates the need for the collection of large numbers of samples. It will readily be seen, by an inspection of the tables, both for water and oysters, that, had almost any of the single sets of results therein set forth been considered by themselves, quite an erroneous idea of the real conditions in the river would have been obtained.

In the tables showing the results of the examination of water from the Maurice River, the point at which the sample was collected is designated by a letter and a number, these locating the point of intersection of ordinates on sectional maps of the river made for this purpose. A map of the river from the mouth to Millville, showing on a reduced scale the location of the four working sectional maps, is shown on page

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TABLE 14.—RESULTS OF ANALYSIS OF WATER

Sample Number.	Date Collected.	Hour Collected.	Tide.	Weather.	LOCATION.
M 68	Sept. 12	1:30 p. m.	1 hr. ebb	Fair	Sec. 4, I. 9—Just above White Marsh Run.
M 69	Sept. 12	1:30 p. m.	1 hr. ebb	Fair	Sec. 4, I. 9—Mid-stream.
M 70	Sept. 12	1:30 p. m.	1 hr. ebb	Fair	Sec. 4, I. 9—East bank.
M 71	Sept. 12	2:30 p. m.	Ebb	Fair	Sec. 4, I. 9—West bank.
M 72	Sept. 12	2:30 p. m.	Ebb	Fair	Sec. 4, I. 9—Mid-stream.
M 73	Sept. 12	2:30 p. m.	Ebb	Fair	Sec. 4, I. 9—East bank.
M 74	Sept. 12	3:15 p. m.	Ebb	Fair	Sec. 4, I. 9—West bank.
M 75	Sept. 12	3:15 p. m.	Ebb	Fair	Sec. 4, I. 9—Mid-stream.
M 76	Sept. 12	3:15 p. m.	Ebb	Fair	Sec. 4, I. 9—East bank.
M 77	Sept. 12	4:00 p. m.	Ebb	Fair	20′ from Millville sewer outlet.
M 78	Sept. 12	4:00 p. m.	Ebb	Fair	150 yds. above Millville sewer outlet mid-stream.
M 79	Sept. 12	4:00 p. m.	Ebb	Fair	100 yds. below Millville sewer outlet 20′ from shore.
M 80	Sept. 12	4:00 p. m.	Ebb	Fair	250 yds. below Millville sewer outlet 100′ from shore.
M 168	Sept. 27	.....	High water	Fair	500 yds. above Millville sewer outlet.
M 169	Sept 27	.....	High water	Fair	Sec. 4, K. 9.
M 170	Sept. 27	.....	High water	Fair	Sec. 4, J. 8.
M 171	Sept. 27	.....	High water	Fair	Sec. 4, J. 10.
M 172	Sept. 27	11:00 a. m.	1 hr. ebb	Fair	Sec. 4, J. 10.
M 173	Sept. 28	12:00 a. m.	High water	Fair	Sec. 4, J. 10.
M 174	Sept. 28	1:15 p. m.	Ebb	Fair	Sec. 4, J. 10.
M 175	Sept. 28	.....	Ebb	Fair	Sec. 4, J. 10.
M 176	Sept 28	.....	Ebb	Fair	Sec. 4, K. 8.
M 177	Sept. 28	.....	Ebb	Fair	Sec. 4, K. 8.
M 178	Sept. 28	.....	Ebb	Fair	Sec. 4, K. 7.
M 179	Sept. 28	1:30 p. m.	Ebb	Fair	Sec. 4, K. 7.
M 180	Sept. 28	.....	Ebb	Fair	Sec. 4, K. 7.
M 182	Sept. 28	.....	Ebb	Fair	Sec. 4, L. 6.
M 183	Sept. 28	.....	Ebb	Fair	Sec. 4, K. 6.
M 184	Sept. 28	.....	Ebb	Fair	Sec. 4, K. 5—Just above Millville sewer outlet.
M 185	Sept. 28	.....	Ebb	Fair	Sec. 4, K. 5—Just above Millville sewer outlet.
M 186	Sept. 28	.....	Ebb	Fair	Sec. 4, K. 5—Opposite Millville sewer outlet.
M 187	Sept. 28	.....	Ebb	Fair	Sec. 4, L. 4—Below Millville sewer outlet 150 yds.
M 188	Sept. 28	.....	Ebb	Fair	Sec. 4, L. 4—Below Millville sewer outlet 350 yds.
M 189	Sept. 28	.....	Ebb	Fair	Sec. 4, L. 4—Below Millville sewer outlet.
M 190	Sept. 28	.....	Ebb	Fair	Sec. 4, L. 3—Below Millville sewer outlet.
M 191	Sept. 28	.....	Ebb	Fair	Sec. 4, K. 2.
M 192	Sept. 28	.....	Ebb	Fair	Sec. 4, K. 2.
M 211	Oct. 6	8:00 a. m.	2 hrs. ebb	Fair	Sec. 4, J. 11.
M 212	Oct. 6	9:10 a. m.	Ebb	Fair	Sec. 4, J. 10.
M 213	Oct. 6	10:30 a. m.	Ebb	Fair	Sec. 4, J. 11.
M 214	Oct. 6	.....	.....	....	12″ pipe at lower end of dock at Whitall Tatum's.
M 215	Oct. 6	.....	.....	....	2″ pipe 40 ft. above where M 214 was taken.
M 216	Oct. 6	.....	.....	....	15″ pipe just above where M 215 was taken.
M 217	Oct. 6	.....	.....	....	Drain from swamp opp. Whitall Tatum's.
M 218	Oct. 6	.....	.....	....	8′ conduit at Woods' factory.
M 219	Oct. 6	.....	.....	....	8′x8′ conduit just above source of M 218.
M 220	Oct. 6	.....	.....	....	Raceway from under Woods' factory.
M 221	Oct. 6	.....	.....	....	1½′x2′ conduit near Woods' factory.

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FROM MAURICE RIVER—MILLVILLE SECTION.

Presumptive Test for B. Coli Communis. Lactose Bile.			Temperature °F.	REMARKS.
1.0 cc.	0.1 cc.	0.01 cc.		
+	+	—	75	
+	+	+	.....	B. coli absent in 0.001 cc.
+	+	—	.....	B. coli absent in 0.001 cc.
+	+	—	.....	
+	+	+	.....	B. coli absent in 0.001 cc.
+	+	+	.....	B. coli absent in 0.001 cc.
+	+	—	.....	B. coli absent in 0.001 cc.
+	+	+	.....	
+	+	+	.....	B. coli in 0.001 cc.; absent in 0.0001 cc.
+	+	+	.....	B. coli absent in 0.001 cc.
+	+	+	.....	B coli in 0.001 cc.; absent in 0.0001 cc.
+	+	—	.....	
+	+	+	.....	
+	+	+	.....	B. coli absent in 0.001 cc.
+	+	—	.....	B. coli absent in 0.001 cc.
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	
+	+	+	.....	
+	—	—	.....	B. coli absent in 0.001 cc.
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	
+	—	—	.....	
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	200′ from outlet.
+	+	+	.....	B. coli absent in 0.001 cc.
+	+	0	.....	
+	+	+	.....	B. coli absent in 0.001 cc.
+	+	+	.....	B. coli absent in 0.001 cc.
+	+	—	.....	
+	+	—	.....	
+	+	—	61	
+	—	—	.....	
+	+	—	.....	
—	—	—	.....	Upper factory.
—	—	—	.....	
—	—	—	.....	
+	—	—	.....	
+	+	—	.....	
—	—	—	.....	
+	+	+	.....	In 0.001 cc.
+	—	—	.....	Water was pink
+	+	.....	.....	

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TABLE 14.—RESULTS OF ANALYSIS OF WATER

Sample Number.	Date Collected.	Hour Collected.	Tide.	Weather.	LOCATION.
M 222	Oct. 6	.....	.....	....	5" pipe near Woods' boiler-house.
M 223	Oct. 6	12:50 m.	2 hrs. ebb	Fair	River just above foot-bridge at Millville.
M 224	Oct. 6	12:50 m.	2 hrs. ebb	Fair	River just above Woods' raceway.
M 225	Oct. 6	12:50 m.	2 hrs. ebb	Fair	Raceway east of Woods' raceway.
M 226	Oct. 6	.....	Ebb	Fair	Sec. 4, I. 15.
M 227	Oct. 6	1:15 p. m.	Low water	Fair	Sec. 4, J. 11.
M 228	Oct. 7	12:00 p. m.	Ebb	Fair	Sec. 4, J. 11.
M 229	Oct. 7	1:00 p. m.	.....	....	Same as M. 214.
M 230	Oct. 7	1:00 p. m.	.....	....	Same as M. 215.
M 231	Oct. 7	1:15 p. m.	.....	....	Same as M. 216.
M 232	Oct. 7	1:15 p. m.	.....	....	Same as M. 217.
M 233	Oct. 7	1:30 p. m.	.....	....	Same as M. 218.
M 234	Oct. 7	1:30 p. m.	.....	....	Same as M. 219
M 235	Oct. 7	1:45 p. m.	.....	....	Union Lake left end of dam.
M 236	Oct. 7	1:45 p. m.	.....	....	Union Lake right end of dam.
M 237	Oct. 7	2:00 p. m.	.....	....	Union Lake near raceway.
M 238	Oct. 7	4:30 p. m.	.....	....	Raw sewage Millville sewage plant.
M 239	Oct. 7	4:30 p. m.	.....	....	Outflow of septic tanks Millville sewage plant.
M 240	Oct. 7	4:30 p. m.	.....	....	After aeration Millville sewage plant.
M 241	Oct. 7	4:30 p. m.	.....	....	After passing through beds.
M 242	Oct. 7	4:30 p. m.	.....	....	After passing through beds.
M 243	Oct. 7	4:30 p. m.	.....	....	Finished effluent.
M 244	Oct. 7	4:30 p. m.	.....	....	River 20 ft. from sewer outlet.
M 245	Oct. 7	4:30 p. m.	2 hrs. flood	....	River 50 ft. above sewer outlet.
M 246	Oct. 7	4:30 p. m.	2 hrs. flood	Good	100 ft. above Millville sewer outlet.
M 247	Oct. 7	4:40 p. m.	2 hrs. flood	Good	300 ft. above Millville sewer outlet.

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FROM MAURICE RIVER—MILLVILLE SECTION.—*Continued.*

Presumptive Test for B. Coli Communis. Lactose Bile.			Temperature °F.	REMARKS.
1.0 cc.	0.1 cc.	0.01 cc.		
—	—	—	.....	
+	—	—	.....	
+	—	—	.....	Overflow from Unior Lake.
+	+	—	.....	
°0	0	0	63	
+	—	—	64	*No B. coli test.
+	—	—	.....	
—	—	—	.....	
—	—	—	.....	
+	—	—	.....	
+	—	—	.....	
—	—	—	.....	Water was very warm.
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
.....	+	+	.....	B. coli in 0.00001 cc.; absent in 0.000001 cc.
.....	+	+	.....	B. coli in 0.00001 cc.; absent in 0.000001 cc.
.....	+	+	.....	B. coli in 0.0001 cc.; absent in 0.000001 cc.
.....	+	+	.....	B. coli in 0.001 cc.; absent in 0.0001 cc.
.....	+	+	.....	B. coli absent in 0.001 cc.
.....	+	+	.....	
+	+	+	.....	B. coli in 0.001 cc.; absent in 0.0001 cc.
+	+	+	.....	B. coli absent in 0.001 cc.
+	+	—	.....	
+	+	—	.....	

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TABLE 15.—RESULTS OF ANALYSIS OF WATER TAKEN FROM MAURICE

Sample number.	Date collected.	Hour collected.	Tide.	Weather.	Location.
M 1	Sept. 7	11 :25 a. m.	Ebb	Fair	Sec. 2, P. 9—150 feet from shore.
M 2	Sept. 7	12 :25 a. m.	Low water	Fair	Sec. 2, P. 9.
M 3	Sept. 7	1 :50 p. m.	Flood	Fair	Sec. 2, P. 9.
M 4	Sept. 7	3 :00 p. m.	Flood	Fair	Sec. 2, P. 9.
M 5	Sept. 7	4 :00 p. m.	Flood	Fair	Sec. 2, P. 9.
M 6	Sept. 7	5 :00 p. m.	Flood	Fair	Sec. 2, P. 9.
M 85	Sept. 13	4 :00 p. m.	Flood	Fair	Sec. 2, V. 6—50 feet above mouth of Crowder's Br.
M 121	Sept. 17	11 :05 a. m.	2 hrs. flood	Fair	Sec. 2, V. 5—Mid-stream.
M 122	Sept. 17	12 :00 a. m.	Flood	Fair	Sec. 2, V. 6—West bank.
M 123	Sept. 17	12 :00 a. m.	Flood	Fair	Sec. 2, V. 5—Mid-stream.
M 124	Sept. 17	12 :00 a. m.	Flood	Fair	Sec. 2, V. 5—East bank.
M 125	Sept. 17	2 :15 p. m.	Flood	Fair	Sec. 2, V. 5—West bank.
M 126	Sept. 17	2 :15 p. m.	Flood	Fair	Sec. 2, V. 5—Mid-stream.
M 127	Sept. 17	2 :15 p. m.	Flood	Fair	Sec. 2, V. 6—East bank.
M 128	Sept. 17	4 :00 p. m.	½ hr. ebb	Fair	Sec. 2, V. 6—West bank.
M 129	Sept. 17	4 :00 p. m.	Ebb	Fair	Sec. 2, V. 5—Mid-stream.
M 130	Sept. 17	4 :00 p. m.	Ebb	Fair	Sec. 2, V. 5—East bank.
M 131	Sept. 17	4 :30 p. m.	Ebb	Fair	Sec. 2, V. 5—West bank.
M 132	Sept. 17	4 :30 p. m.	Ebb	Fair	Sec. 2, V. 5—Mid-stream.
M 133	Sept. 17	4 :30 p. m.	Ebb	Fair	Sec. 2, V. 6—East bank.
M 134	Sept. 17	5 :00 p. m.	Ebb	Fair	Sec. 2, V. 6—West bank.
M 135	Sept. 17	5 :00 p. m.	Ebb	Fair	Sec. 2, V. 5—Mid-stream.
M 136	Sept. 17	5 :00 p. m.	Ebb	Fair	Sec. 2, V. 6—East bank.
M 137	Sept. 17	6 :00 p. m.	Ebb	Fair	Sec. 2, V. 6—West bank.
M 138	Sept. 17	6 :00 p. m.	Ebb	Fair	Sec. 2, V. 5—Mid-stream.
M 139	Sept. 17	6 :00 p. m.	Ebb	Fair	Sec. 2, V. 6—East bank.
M 140	Sept. 17	7 :00 p. m.	Ebb	Fair	Sec. 2, V. 6—East bank.
M 141	Sept. 18	7 :15 a. m.	5 hrs. ebb	Fair	Sec. 2, V. 5—Mid-stream.
M 142	Sept. 18	7 :45 a. m.	Ebb	Fair	Sec. 2, V. 5—Mid-stream.
M 143	Sept. 18	8 :15 a. m.	Ebb	Fair	Sec. 2, V. 5—Mid-stream.
M 144	Sept. 18	8 :30 a. m.	Ebb	Fair	Sec. 2, V. 5—Mid-stream.
M 145	Sept. 18	8 :30 a. m.	Ebb	Fair	Sec. 2, V. 5—Mid-stream.
M 146	Sept. 18	8 :30 a. m.	Ebb	Fair	Sec. 2, V. 6—East bank.
M 147	Sept. 18	9 :00 a. m.	Ebb	Fair	Sec. 2, V. 6—West bank.
M 148	Sept. 18	9 :00 a. m.	Ebb	Fair	Sec. 2, V. 5—Mid-stream.
M 149	Sept. 18	9 :00 a. m.	Ebb	Fair	Sec. 2, V. 6—East bank.
M 150	Sept. 18	10 :00 a. m.	½ hr. flood	Fair	Sec. 2, V. 5—West bank.
M 151	Sept. 18	10 :00 a. m.	½ hr. flood	Fair	Sec. 2, V. 5—Mid-stream.
M 152	Sept. 18	10 :00 a. m.	½ hr. flood	Fair	Sec. 2, V. 6—East bank.
M 156	Sept. 25	12 :35 a. m.	3 hrs. ebb	Rain	Sec. 2, P. 11—Just above small branch.
M 157	Sept. 25	12 :35 a. m.	3 hrs. ebb	Rain	Sec. 2, P. 11.
M 158	Sept. 25	12 :40 a. m.	Ebb	Rain	Sec. 2, P. 11.
M 164	Sept. 27	8 :40 a. m.	4 hrs. flood	Fair	Sec. 2, J. 32.
M 165	Sept. 27	8 :50 a. m.	4 hrs. flood	Fair	Sec. 2, P. 23—Just above Manumuskin river.
165½	Sept. 27	9 :15 a. m.	High water	Fair	Sec. 3, T. 10.
M 166	Sept. 27	9 :20 a. m.	High water	Fair	Sec. 3, R. 14.
M 167	Sept. 27	9 :20 a. m.	High water	Fair	Sec. 3, O. 17.
M 193	Sept. 28	.....	Ebb	Fair	Sec. 3, I. 27.
M 194	Sept. 28	.....	Ebb	Fair	Sec. 3, K. 28.
M 195	Sept. 28	.....	Ebb	Fair	Sec. 3, O. 18—Mud dredge at Sec. 3. M. 22.
M 196	Sept. 28	.....	Ebb	Fair	Sec. 3, P. 11.
M 197	Sept. 28	.....	Ebb	Fair	Sec. 3, R. 10.
M 198	Sept. 28	.....	Ebb	Fair	Sec. 3, U. 10.
M 199	Sept. 28	2 :15 p. m.	Ebb	Fair	Sec. 3, V. 5.
M 200	Sept. 28	.....	Ebb	Fair	Sec. 2, O. 22.
M 201	Sept. 28	.....	Ebb	Fair	Sec. 2, O. 23.
M 202	Sept. 28	.....	Ebb	Fair	Sec. 2, P. 24.
M 203	Sept. 28	.....	Ebb	Fair	Sec. 2 Q. 24.
M 204	Sept. 28	.....	Ebb	Fair	Sec. 2 Q. 24.

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RIVER—SECTION BETWEEN MILLVILLE SECTION AND LONG REACH SECTION.

Presumptive test for B. Coli Communis. Lactose Bile.			Temperature °F.	Remarks.
1.0 cc.	0.1 cc.	0.01 cc.		
+	—	—	78	Nearly low water.
+	—	—	75	
+	—	—	75.5	
+	—	—	76	
+	—	—	76	
+	—	—	76	
+	—	—	.....	
—	+	—	76	
—	—	—	.....	
+	+	—	.....	
+	+	—	76	
+	+	—	.....	
+	—	—	.....	
+	+	—	.....	
+	+	—	73	
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	
+	—	—	.....	
—	—	—	.....	
+	—	—	.....	
+	+	—	.....	
+	—	—	.....	
+	+	—	.....	
—	—	—	.....	
+	+	+	.....	
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	
+	+	+	.....	
+	+	—	.....	
+	—	—	.....	
+	+	—	.....	
+	+	+	.....	
+	+	—	.....	
+	+	—	.....	
+	+	+	.....	Very heavy rain during past 40 hours.
+	+	—	.....	
+	+	—	.....	
+	—	—	.....	
+	—	+	.....	
+	+	+	.....	
+	+	—	.....	
+	+	+	.....	
+	+	—	.....	
+	+	+	.....	
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	
+	—	—	.....	

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TABLE 15.—RESULTS OF ANALYSIS OF WATER TAKEN FROM MAURICE RIVER—

Sample number.	Date collected.	Hour collected.	Tide.	Weather.	Location.
M 205	Sept. 28	.....	Ebb	Fair	Sec. 2, R. 23.
M 206	Sept. 28	.....	Ebb	Fair	Sec. 2, S. 19.
M 207	Sept. 28	.....	Ebb	Fair	Sec. 2, T. 19.
M 208	Sept. 28	.....	Ebb	Fair	Sec. 2, U. 20.
M 209	Sept. 28	.....	Ebb	Fair	Sec. 2, U. 19.
M 210	Sept. 28	.....	Ebb	Fair	Sec. 2, U. 17.
210½	Sept. 28	.....	Ebb	Fair	Sec. 2, R. 12.
M 248	Oct. 15	10:00 a. m.	1 hr. flood	Fair	Sec. 3, I. 30.
M 249	Oct. 15	.....	Flood	Fair	Sec. 3, S. 13.
M 250	Oct. 15	.....	Flood	Fair	Sec. 3, U. 19.
M 251	Oct. 15	.....	Flood	Fair	Sec. 2, P. 23.
M 252	Oct. 15	.....	Flood	Fair	Sec. 2, R. 12.
M 253	Oct. 15	.....	Flood	Fair	Sec. 2, Q. 11.
M 254	Oct. 15	.....	Flood	Fair	Sec. 2, Y. 32.
M 255	Oct. 15	12:40 m.	Flood	Fair	Sec. 1, T. 14.

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SECTION BETWEEN MILLVILLE SECTION AND LONG REACH SECTION —*Continued.*

Presumptive test for B. Coli Communis. Lactose Bile.			Temperature °F.	Remarks.
1.0 cc.	0.1 cc.	0.01 cc.		
+	+	−	.....	
+	+	+	.....	
+	+	−	.....	
+	−	−	.....	
+	+	−	.....	
+	+	−	62	Strong southwest wind.
+	−	−	.....	
+	+	−	.....	
+	−	+	.....	
+	+	−	.....	
+	−	−	.....	
+	−	−	.....	
+	−	−	.....	

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TABLE 16.—RESULTS OF ANALYSIS OF WATER.

Sample number.	Date collected.	Hour collected.	Tide.	Weather.	Location.
M 7	Sept. 8	12:00 m.	5 hrs. ebb	Fair	Sec. 1, K. 14—Mid-stream.
M 8	Sept. 8	1:10 p. m.	Ebb	Fair	Sec. 1, K. 14—Mid-stream.
M 9	Sept. 8	1:30 p. m.	Low water	Fair	Sec. 1, K. 14—Mid-stream.
M 10	Sept. 8	4:00 p. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 11	Sept. 8	5:00 p. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 12	Sept. 8	6:35 p. m.	Flood	Fair	Sec 1, K. 14—Mid-stream.
M 13	Sept. 8	8:15 p. m.	High water	Fair	Sec. 1, K. 14—Mid-stream.
M 32	Sept. 10	9:05 a. m.	½ hr. ebb	Fair	Sec. 1, J. 10—West bank.
M 33	Sept. 10	9:05 a. m.	½ hr. ebb	Fair	Sec. 1, J. 10—Mid-stream.
M 34	Sept. 10	9:05 a. m.	½ hr. ebb	Fair	Sec. 1, J. 10—East bank.
M 35	Sept. 10	10:30 a. m.	Ebb	Fair	Sec. 1, J. 10—West bank.
M 36	Sept. 10	10:30 a. m.	Ebb	Fair	Sec. 1, J. 10—Mid-stream.
M 37	Sept. 10	10:30 a. m.	Ebb	Fair	Sec. 1, J. 10—East bank.
M 38	Sept. 10	11:15 a. m.	Ebb	Fair	Sec. 1, J. 10—West bank.
M 39	Sept. 10	11:15 a. m.	Ebb	Fair	Sec. 1, J. 10—Mid-stream.
M 40	Sept. 10	11:15 a. m.	Ebb	Fair	Sec. 1, J. 10—East bank.
M 41	Sept. 10	12:30 p. m.	Ebb	Fair	Sec. 1, J. 10—West bank.
M 42	Sept. 10	12:30 p. m.	Ebb	Fair	Sec. 1, J. 10—Mid-stream.
M 43	Sept. 10	12:30 a. m.	Ebb	Fair	Sec. 1, J. 10—East bank.
M 44	Sept. 10	1:30 a. m.	Ebb	Fair	Sec. 1, J. 10—East bank.
M 45	Sept. 10	1:30 a. m.	Ebb	Fair	Sec. 1, J. 10—Mid-stream.
M 46	Sept. 10	1:30 a. m.	Ebb	Fair	Sec. 1, J. 10—East bank.
M 47	Sept. 10	3:10 a. m.	Ebb	Fair	Sec. 1, J. 10—West bank.
M 48	Sept. 10	3:10 a. m.	Ebb	Fair	Sec. 1, J. 10—Mid-stream.
M 49	Sept. 10	3:10 a. m.	Ebb	Fair	Sec. 1, J. 10—East bank.
M 50	Sept. 11	10:15 a. m.	¼ hr. ebb	Fair	Sec. 1, P. 15—West bank.
M 51	Sept. 11	10:15 a. m.	¼ hr. ebb	Fair	Sec. 1, P. 15—Mid-stream.
M 52	Sept. 11	10:15 a. m.	¼ hr. ebb	Fair	Sec. 1, P. 15—East bank.
M 53	Sept. 11	11:15 a. m.	Ebb	Fair	Sec. 1, P. 15—West bank.
M 54	Sept. 11	11:15 a. m.	Ebb	Fair	Sec. 1, P. 15—Mid-stream.
M 55	Sept. 11	11:15 p. m.	Ebb	Fair	Sec. 1, P. 15—East bank.
M 56	Sept. 11	12:45 a. m.	Ebb	Fair	Sec. 1, P. 15—West bank.
M 57	Sept. 11	12:45 a. m.	Ebb	Fair	Sec. 1, P. 15—Mid-stream.
M 58	Sept. 11	12:45 a. m.	Ebb	Fair	Sec. 1, P. 15—East bank.
M 59	Sept. 11	2:00 p. m.	Ebb	Fair	Sec. 1, P. 15—West bank.
M 60	Sept. 11	2:00 p. m.	Ebb	Fair	Sec. 1, P. 15—Mid-stream.
M 61	Sept. 11	2:00 p. m.	Ebb	Fair	Sec. 1, P. 15—East bank.
M 62	Sept. 11	3:30 p. m.	Ebb	Fair	Sec. 1, P. 15—West bank.
M 63	Sept. 11	3:30 p. m.	Ebb	Fair	Sec. 1, P. 15—Mid-stream.
M 64	Sept. 11	3:30 p. m.	Ebb	Fair	Sec. 1, P. 15—East bank.
M 65	Sept. 11	4:45 p. m.	Ebb	Fair	Sec. 1, P. 15—West bank.
M 66	Sept. 11	4:45 p. m.	Ebb	Fair	Sec. 1, P. 15—Mid-stream.
M 67	Sept. 11	4:45 p. m.	Ebb	Fair	Sec. 1, P. 15—East bank.
M 86	Sept. 14	7:15 a. m.	½ hr. flood	Fair	Sec. 1, K. 14—Mid-stream.
M 87	Sept. 14	7:45 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 88	Sept. 14	8:15 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 89	Sept. 14	8:45 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 90	Sept. 14	9:15 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 91	Sept. 14	9:45 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 92	Sept. 14	10:15 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 93	Sept. 14	10:45 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 94	Sept. 16	7:00 a. m.	6 hrs. ebb	Fair	Sec. 1, K. 14—Mid-stream.
M 95	Sept. 16	7:15 a. m.	Ebb	Fair	Sec. 1, K. 14—Mid-stream.
M 96	Sept. 16	7:30 a. m.	Ebb	Fair	Sec. 1, K. 14—Mid-stream.
M 97	Sept. 16	7:45 a. m.	Low water	Fair	Sec. 1, K. 14—Mid-stream.
M 98	Sept 16	8:00 a. m.	Low water	Fair	Sec. 1, K. 14—Mid-stream.
M 99	Sept. 16	8:15 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 100	Sept 16	8:30 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 101	Sept. 16	8:45 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 102	Sept. 16	9:00 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 103	Sept. 16	9:15 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.

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FROM MAURICE RIVER—LONG REACH SECTION.

Presumptive test for B. Coli Communis. Lactose Bile.			Temperature °F.	Remarks.
1.0 cc.	0.1 cc.	0.01 cc.		
+	—	—	78	
—	—	—	77	
+	—	—	76	
+	—	—	77	
+	—	—	78	
+	—	—	77	
+	—	—	78	
—	—	—	79	
—	—	—	79	
+	—	—	79	
—	—	—	82	
+	—	—	82	
—	—	—	80	
—	—	—	82	
—	—	—	80	
+	—	—	79	
+	—	+	87	
+	+	—	85	
+	—	—	86	
+	—	—	79	
+	+	—	79	
+	+	—	79	
+	+	—	80	
+	+	+	79	
+	+	—	79	
—	—	—	79	
+	—	—	79	
—	—	—	78.5	
—	—	—	80	
+	—	—	80	
—	—	—	79	
—	—	—	82	
—	+	—	82	
+	+	—	81	
+	—	—	85	
+	+	—	85	
+	+	—	85	
+	+	—	80	
+	—	—	79	
+	+	—	79	
+	—	—	79	
+	+	—	78	
+	—	—	78	
+	—	—	.....	Strong southwest wind on 14th & 15th.
+	+	—	78.5	
+	+	—	78.5	
+	+	—	78	
+	—	—	78	
+	+	—	78	
+	—	—	78	
+	+	—	78	
+	+	—	74	Rain on 15th P. M.
+	+	—	74	
+	—	—	74	Strong northwest wind.
+	+	—	74	
+	+	—	74	
—	—	—	75	
+	+	—	75	
+	+	—	75	
+	+	—	75	
+	+	—	75	

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TABLE 16.—RESULTS OF ANALYSIS OF WATER

Sample number.	Date collected.	Hour collected.	Tide.	Weather.	Location.
M 104	Sept. 16	9:30 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 105	Sept. 16	10:30 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 106	Sept. 16	11:30 a. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 107	Sept. 16	12:30 p. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 108	Sept. 16	1:05 p. m.	Flood	Fair	Sec. 1, K. 14—Mid-stream.
M 109	Sept. 16	2:00 p. m.	High water	Fair	Sec. 1, K. 14—Mid-stream.
M 110	Sept. 16	3:00 p. m.	Ebb	Fair	Sec. 1, K. 14—Mid-stream.
M 111	Sept. 16	4:00 p. m.	Ebb	Fair	Sec. 1, K 14—Mid-stream.
M 112	Sept. 16	4:30 p. m.	Ebb	Fair	Sec. 1, K. 14—Mid-stream.
M 113	Sept. 16	5:30 p. m.	Ebb	Fair	Sec. 1, K. 14—Mid-stream.
M 114	Sept. 16	6:30 p. m.	Ebb	Fair	Sec. 1, K. 14—Mid-stream.
M 115	Sept. 16	6:30 p. m.	Ebb	Fair	Sec. 1, K. 14—Upper end of Peace's float.
M 116	Sept. 16	6:30 p. m.	Ebb	Fair	Sec. 1, K. 14—Lower end of Peace's float.
M 117	Sept. 17	7:20 a. m.	Ebb	Fair	Sec. 1, K. 14—Mid-stream.
M 118	Sept. 17	7:40 a. m.	Ebb	Fair	Sec. 1, K. 14—Mid-stream.
M 256	Oct. 15	1:00 p. m.	4 hrs. flood	Fair	Sec. 1, N. 14—Mid-stream.
M 257	Oct. 15	2:15 p. m.	1st of ebb	Fair	Sec. 1, N. 14—Mid-stream.
M 258	Oct. 15	3:45 p. m.	Ebb	Fair	Sec. 1, N. 14—Mid-stream.
M 259	Oct. 15	4:30 p. m.	Ebb	Fair	Sec. 1, N. 14—Mid-stream.
M 260	Oct. 15	5:00 p. m.	Ebb	Fair	Sec. 1, N. 14—Mid-stream.
M 261	Oct. 15	5:30 p. m.	Ebb	Fair	Sec. 1, N. 14—Mid-stream.
M 262	Oct. 15	6:20 p. m.	Ebb	Fair	Sec. 1, N. 14—Mid-stream.
M 263	Oct. 16	7:15 a. m.	Ebb	Fair	Sec. 1, N. 14—Mid-stream.
M 264	Oct. 16	8:15 a. m.	½ hr. flood	Fair	Sec. 1, N. 14—Mid-stream.
M 265	Oct. 16	3:00 p. m.	2 hrs. ebb	Fair	Sec. 1, N. 14—Mid-stream.
M 266	Oct. 16	3:50 p. m.	Ebb	Fair	Sec. 1, N. 14—Mid-stream.
M 267	Oct. 16	4:20 p. m.	Ebb	Fair	Sec. 1, N. 14—Mid-stream.
M 268	Oct. 16	5:00 p. m.	Ebb	Fair	Sec. 1, N. 14—Mid-stream.
M 269	Oct. 16	5:35 p. m.	Ebb	Fair	Sec. 1, N. 14—Mid-stream.
M 270	Oct. 18	7:50 a. m.	5 hrs. ebb	Fair	Sec. 1, M. 14—Mid-stream.
M 271	Oct. 18	8:20 a. m.	Ebb	Fair	Sec. 1, M. 14—Mid-stream.
M 272	Oct. 18	9:00 a. m.	Ebb	Fair	Sec. 1, M. 14—Mid-stream.
M 273	Oct. 18	10:45 a. m.	1 hr. flood	Fair	Sec. 1, M. 14—Mid-stream.
M 274	Oct. 18	11:45 a. m.	Flood	Fair	Sec. 1, M. 14—Mid-stream.
M 275	Oct. 18	12:20 p. m.	Flood	Fair	Sec. 1, M. 14—Mid-stream.
M 276	Oct. 18	1:50 p. m.	Flood	Fair	Sec. 1, M. 14—Mid-stream.
M 277	Oct. 18	2:20 p. m.	Flood	Fair	Sec. 1, M. 14—Mid-stream.
M 278	Oct. 18	3:45 p. m.	Flood	Fair	Sec. 1, M. 14—Mid-stream.

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FROM MAURICE RIVER—LONG REACH SECTION—*Continued.*

Presumptive test for B. Coli Communis, Lactose Bile.			Temperature ° F.	Remarks.
1.0 cc.	0.1 cc.	0.01 cc.		
+	+	—	76	
+	+	—	76	
+	—	—	76	
+	—	—	76	
+	—	—	76	
O	—	—	76	
+	—	—	76	
+	O	—	74	
—	—	—	74	
+	+	—	73	
+	+	—	73	
+	+	+	73	Oysters were put on this float at 4 P. M.
+	+	—	.....	
+	—	+	72	Nearly low slack water.
—	+	—	73	Strong southwest wind.
+	+	—	.....	
+	+	—	62	
+	—	—	.....	
+	—	—	.....	
+	—	—	.....	
+	—	—	.....	
+	+	—	.....	
+	—	—	.....	Almost low slack water.
—	—	—	.....	North wind.
—	—	—	.....	North wind.
—	—	—	.....	
—	—	—	.....	
+	—	—	.....	
+	+	—	.....	
+	+	—	60.5	Southwest wind.
—	+	—	60.5	
+	—	—	61	
+	—	—	.....	
+	+	—	64	
+	+	—	.....	
+	—	—	.....	
+	+	—	.....	Northwest wind.
+	—	—	.....	

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TABLE 17.—RESULTS OF ANALYSIS OF WATER FROM MAURICE RIVER

Sample number.	Date collected.	Hour collected.	Tide.	Weather.	Location.
M 14	Sept. 9	8:00 a. m.	High water	Fair	Sec. 1, E. 4—150 ft. from shore west bank.
M 15	Sept. 9	8:00 a. m.	High water	Fair	Sec. 1, E. 4—Mid-stream.
M 16	Sept. 9	8:00 a. m.	High water	Fair	Sec. 1, E. 4—East bank.
M 17	Sept. 9	9:00 a. m.	Ebb	Fair	Sec. 1, E. 4—West bank.
M 18	Sept. 9	9:00 a. m.	Ebb	Fair	Sec. 1, E. 4—Mid-stream.
M 19	Sept. 9	9:00 a. m.	Ebb	Fair	Sec. 1, E. 4—West bank.
M 20	Sept. 9	10:00 a. m.	Ebb	Fair	Sec. 1, E. 4—West bank.
M 21	Sept. 9	10:00 a. m.	Ebb	Fair	Sec. 1, E. 4—Mid-stream.
M 22	Sept. 9	10:00 a. m.	Ebb	Fair	Sec. 1, E. 4—East bank.
M 23	Sept. 9	11:00 a. m.	Ebb	Fair	Sec. 1, E. 4—West bank.
M 24	Sept. 9	11:00 a. m.	Ebb	Fair	Sec. 1, E. 4—Mid-stream.
M 25	Sept. 9	11:00 a. m.	Ebb	Fair	Sec. 1, E. 4—East bank.
M 26	Sept. 9	12:00 a. m.	Ebb	Fair	Sec. 1, E. 4—West bank.
M 27	Sept. 9	12:00 a. m.	Ebb	Fair	Sec. 1, E. 4—Mid-stream.
M 28	Sept. 9	12:00 a. m.	Ebb	Fair	Sec. 1, E. 4—West bank.
M 29	Sept. 9	1:50 p. m.	Ebb	Fair	Sec. 1, E. 4—East bank.
M 30	Sept. 9	1:50 p. m.	Ebb	Fair	Sec. 1, E. 4—Mid-stream.
M 31	Sept. 13	1:50 p. m.	Ebb	Fair	Sec. 1, E. 4—West bank.
M 81	Sept. 13	12:00 a. m.	½ flood	Fair	Sec. C. 3—Maurice River Cove.
M 82	Sept. 13	12:15 a. m.	Flood	Fair	Sec. C. 3—Maurice River Cove.
M 83	Sept. 13	12:30 a. m.	Flood	Fair	Sec. C. 2—Maurice River Cove.
M 159	Sept. 26	.....	2 hrs. ebb	Fair	200 yards off Cape May sewer outlet.
M 160	Sept. 26	.....	2 hrs. ebb	Fair	200 yards off Cape May sewer outlet, 100 yards below.
M 161	Sept. 26	.....	2 hrs. ebb	Fair	200 yards off Cape May sewer outlet, 250 yards below.
M 162	Sept. 26	.....	2 hrs. ebb	Fair	100 yards off Cape May sewer outlet, 100 yards below.
M 163	Sept. 26	.....	2 hrs. ebb	Fair	50 yards off Cape May sewer outlet, 50 yards below.
M 84	Sept. 13	4:00 p. m.	Flood	Fair	Mouth of Crowder's brook.
M 119	Sept. 17	10:35 a. m.	1 hr. flood	Fair	Mouth of Crowder's brook, 200 yards upstream.
M 120	Sept. 17	10:50 a. m.	Flood	Fair	Mouth of Crowder's brook, ¾ mile upstream.
M 153	Sept. 25	12:30 a. m.	3 hrs. ebb	Rain	Brook just above Mauricetown bridge, 200 feet from mouth.
M 154	Sept. 25	12:30 a. m.	3 hrs. ebb	Rain	Brook just above Mauricetown bridge mouth.
M 155	Sept. 25	12:30 a. m.	3 hrs. ebb	Rain	Brook just above Mauricetown bridge mouth.

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COVE, THE MOUTH OF MAURICE RIVER AND MISCELLANEOUS SAMPLES.

Presumptive test for B. Coli Communis. Lactose Bile.			Temperature °F.	Remarks.
1.0 cc.	0.1 cc.	0.01 cc.		
—	—	—	86	
—	—	—	84	
+	—	—	.....	
—	—	—	78	
—	—	—	77	
—	—	—	77	
—	—	—	78	
—	—	—	78	
+	—	—	80	
+	—	—	80	
+	—	—	80	
—	+	—	80	
+	—	—	81	
+	—	—	80	
+	—	—	80	
+	+	—	80	
+	+	—	80	Slack high water at 2 P. M.
+	—	—	80	
—	—	—	75	Maurice River Cove.
—	—	—	75	Maurice River Cove.
—	—	—	.....	Maurice River Cove.
—	—	—	.....	
—	—	—	.....	
+	—	—	.....	
—	—	—	.....	
—	—	—	.....	
+	+	—	73	
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	Heavy rain during past 40 hours.
+	+	+	.....	Large manure pile near stream.
+	+	+	.....	

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TABLE 18.—RESULTS OF ANALYSIS OF SALT OYSTERS FROM MAURICE RIVER COVE.

Sample Number	Date Collected	Presumptive test for B. Coli Communis No. of Lactose Bile tubes showing gas. In 1.0 cc.	In 0.1 cc.	In 0.01 cc.	Score Based on 5 Oysters	SOURCE	REMARKS
* S 1	Sept. 18	2	2	1	5	Maurice River Cove, Sec. D. Bed 186	* Indicates floated sample from same lot.
S 2	" 18	1	0	1	2	" " " Sec. D. Outer grounds	
S 3	" 18	2	0	0	2	" " " Outside of Dead Man	
* S 4	" 18	1	0	0	1	" " " Sec. D. Bed 472	
* S 5	" 19	3	2	1	14	" " " Sec. D. Bed 353	
* S 6	" 19	2	1	0	3	" " " Sec. C. Bed 564	
* S 7	" 20	1	1	0	2	Delaware shore	
* S 8	" 20	4	2	1	23	Maurice River Cove, Sec. D.	
* S 9	" 20	2	1	0	3	" " " Sec. D. Bed 368	
* S 10	" 20	1	0	0	1	" " " Upper deep water	
* S 15	" 20	1	0	0	1	" " " Sec. D.	
* S 16	" 22	0	1	0	1	" " " Sec. D. Inner grounds	
* S 17	" 23	3	0	0	3	" " " Sec D. Miah Maull Shoal	
* S 18	" 22	3	2	2	23	" " " Sec D. Miah Maull Shoal	
S 19	" 24	1	2	0	3	" " " Sec. D. Bed 472	
S 26	" 26	5	5	4	410	" " " Sec. D. Outer grounds	
* S 27	" 27	3	1	1	5	" " " Sec. A. B. Bed 101	
S 29	" 26	4	2	2	32	" " " Sec. C. Bed 562	
S 35	Oct. 1	5	2	2	41	" " " Sec. D.	
S 39	" 1	2	2	1	5	" " " Sec. D.	
* S 40	" 1	2	1	0	3	" " " Sec. A. B. Bed 101	
* S 42	" 1	0	0	0	0	" " " Sec. D.	
S 45	" 1	5	2	1	32	" " " Sec. B.	
S 51	" 2	0	2	0	2	" " " Sec. D.	Planted the 4th
* S 61	" 16	5	4	4	320	" " " Sec. D Miah Maull Shoal	
* S 62	" 16	5	2	1	32		
* S 63	" 16	3	2	0	5	" " " Sec. B.	
* S 64	" 16	3	3	0	14	" " " Sec. B.	
* S 65	" 16	4	2	0	14	Delaware shore	
S 66	" 17	2	1	0	3	Maurice River Cove, Sec. D.	
S 67	" 17	4	3	1	32	Delaware shore	
S 68	" 17	2	0	0	2	" "	
S 69	" 17	1	1	0	2	Maurice River Cove. Dead Man Shoal	
* S 70	" 17	1	0	0	1	" " "	

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TABLE 19.—RESULTS OF ANALYSIS OF FLOATED OYSTERS FROM MAURICE RIVER COVE.

Sample Number	Date Collected	Approximate Number of Hours Floated	Presumptive test for B. Coli Communis No. of Lactose Bile tubes showing gas. In 1.0 cc.	In 0.1 cc.	In 0.01 cc.	Score Based on 5 Oysters	SOURCE	REMARKS
* F 1	Sept. 19	18	5	2	1	32	Maurice River Cove, Sec. D. Bed 186	* Star indicates salt sample from same lot.
* F 4	" " 19	.....	5	4	1	50	" " " Sec. D. Bed 472	
* F 5	" " 20	12	2	1	2	5	" " " Sec. D. Bed 353	
* F 6	" " 20	12	3	1	0	4	" " " Sec. C. Bed 562	
* F 7	" " 21	17	3	1	2	23	Delaware shore	
* F 8	" " 21	17	4	2	0	14		
* F 9	" " 21	17	1	2	0	3	Maurice River Cove, Sec. D. 368	
* F 10	" " 21	36	4	1	0	5	" " " Lower sand	
F 11	" " 21	36	5	0	1	14	" " " Sec. D.	
F 12	" " 23	36	2	2	0	4	" " " Sec. D. Bed 472	
F 13	" " 23	36	3	2	0	5	" " " Sec. D. Bed 353	Rain
F 14	" " 23	.....	5	2	0	23	" " " Sec. C. Bed 562	
* F 15	" " 23	12	4	5	3	230	" " " Sec. D.	
* F 16	" " 24	24	5	4	1	50	" " " Sec. D.	Rain
* F 17	" " 24	20	5	5	0	50	" " "	
* F 18	" " 24	.....	4	3	1	32	" " " Sec. D.	
F 20	" " 25	30	5	4	3	230	" " "	Rain
F 21	" " 25	30	5	5	1	140	" " " Sec. A. B. Bed 101	
F 22	" " 25	12	4	2	1	23	" " " Sec. D.	
F 23	" " 25	12	4	3	1	32	" " " Sec. C.	
F 24	" " 25	12	5	4	2	140	" " " Sec. D.	
F 25	" " 25	24	5	3	0	32	" " " Sec. C. Bed 482	
* F 27	" " 27	12	3	2	1	14	" " " Sec. A. B. Bed 101	
F 28	" " 28	12	4	1	0	5	" " " Sec. C. Bed 562	
F 30	Oct. 1	30	5	3	1	41	" " " Sec. B.	
F 31	" " 1	30	5	5	3	320	" " " Sec. D.	
F 32	" " 1	30	4	4	2	50	" " " Sec. D.	
F 33	" " 1	30	5	4	1	50	" " " Sec. D.	
F 34	" " 1	30	5	4	1	50	" " " Sec. D.	
F 36	" " 1	18	4	2	1	23	" " "	
F 37	" " 1	24	5	3	1	41	" " " Deep water	
F 38	" " 1	24	6	5	2	230	" " "	

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TABLE 19.—RESULTS OF ANALYSIS OF FLOATED OYSTERS FROM MAURICE RIVER COVE.—*Continued.*

Sample Number	Date Collected	Approximate Number of Hours Floated	Presumptive test for B. Coli Communis No. of Lactose Bile tubes showing gas. In 1.0 cc.	Presumptive test for B. Coli Communis No. of Lactose Bile tubes showing gas. In 0.1 cc.	Presumptive test for B. Coli Communis No. of Lactose Bile tubes showing gas. In 0.01 cc.	Score Based on 5 Oysters	SOURCE	REMARKS
• F 40	Oct. 1	24	2	0	0	2	Maurice River Cove, Sec. A. B. Bed 101	
F 41	" 1	12	2	1	0	3	" " "	
• F 42	" 1	12	3	0	0	3	" " "	
F 43	" 1	24	3	0	0	4	" " "	
F 44	" 2	24	5	2	0	32	" " "	
F 46	" 2	12	5	0	0	3	" " "	
F 47	" 2	24	5	5	0	230	" " Sec. D. Bed 103	Planted the 4th.
F 48	" 2	24	4	1	0	5	" " Sec. B. " "	" " "
F 49	" 2	....	3	1	0	4	" " Sec. D. " "	" " "
F 50	" 3	12	3	1	0	5	" " nr Dead Man Shoal	" " "
F 52	" 3	12	5	3	1	50	" " Sec. C.	
F 53	" 3	12	3	4	0	23	" " "	
F 54	" 3	36	4	1	0	14	" " Sec. D.	
F 55	" 16	36	5	3	0	23	" " Sec. D.	
F 56	" 16	36	5	1	0	4	" " Sec. D.	
F 57	" 16	12	3	1	0	23	" " Sec. D.	
F 58	" 16	36	4	2	1	32	Delaware shore.	
F 59	" 16	36	5	3	0	23	Maurice River Cove, Sec. D.	
F 60	" 16	36	5	2	0	0	" " Sec. B.	
• F 61	" 17	24	5	3	0	32	" " Miah Maull Shoal	
• F 62	" 17	24	3	2	1	14	" " "	
• F 63	" 17	24	4	2	0	5	" " Sec. B.	
• F 64	" 17	24	3	1	0	14	" " Sec. B.	
• F 65	" 17	24	4	2	0	14	Delaware shore	
• F 70	" 18	....	4	2	0	14		Southwest wind.

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The total number of water samples collected in Maurice River and Maurice River Cove was 272. Of these, 74 were collected in the vicinity of Millville, from Union Lake, above the dam, to a point about ¼ mile below the sewage disposal plant. These samples include those collected from various pipes emptying into the river in this vicinity. Bacteriological results on these samples were as follows:

Total number of samples	49	
Number showing presumptive test in 1.0 c.c.	47	96%
" " " " " 0.1 "	42	86%
" " " " " 0.01 "	16	33%
" " " " absent	1	2%

In the section of the river from Millville to the head of Long Reach, where the floats are located, the following results were obtained:

Total number of samples	74	
Number showing presumptive test in 1.0 c.c.	70	94%
" " " " " 0.1 "	50	67%
" " " " " 0.01 "	11	15%
" " " " absent	3	4%

In Long Reach the results were as follows:

Total number of samples	94	
Number showing presumptive test in 1.0 c.c.	77	77%
" " " " " 0.1 "	42	42%
" " " " " 0.01 "	4	4%
" " " " absent	22	23%

At the mouth of the river and in the cove 26 samples were collected with the following results:

Total number of samples	26	
Number showing presumptive test in 1.0 c.c.	11	42%
" " " " " 0.1 "	3	11%
" " " " " 0.01 "	0	0
" " " " absent	14	53%

The total number of oyster samples collected was 91, of which 34 were salt oysters taken directly from the cove, and 57 had been

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floated for various lengths of time. The results of the examination of the oysters may be summarized as follows:

	Salt		*Floated*		*Total*	
Total number of samples	34		57		91	
Number having score of 23 and under	27	79%	34	59%	61	67%
" " " over 23	7	18%	23	40%	30	33%
" " " " 50	2	5%	16	28%	18	10%

In the examination of oysters, twelve were collected of each lot, from which were selected five, in accordance with the standard methods of the American Public Health Association, and the results obtained are expressed by the method of scoring adopted by that Association. In the collection of pairs of samples, one salt and one floated, from the same lot of oysters, the salt oysters were taken directly from the boats as they came in from the cove. The floated oysters were taken at the end of the floating period when they were removed to the scows by the oystermen. The following table shows the results of what pairs it was possible to collect. It was somewhat difficult at times to secure pairs of samples, owing to the fact that the oysters were frequently taken from the floats during the night.

TABLE SHOWING SCORES OF SALT AND FLOATED OYSTERS OF THE SAME LOT.

Number.	*Score Salt.*	*Score after floating.*	*Length of time floated.*
1	5	123	18
4	1	50	..
5	14	5	12
6	3	4	12
7	2	23	17
8	23	14	17
9	3	3	17
10	1	5	36
15	1	230	12
16	1	50	24
17	3	50	20
18	23	32	..
27	5	14	12
40	3	2	24
42	0	3	12
61	320	32	24
62	32	14	24
63	5	5	24
64	14	14	24
65	14	14	24
70	1	14	..

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An inspection of this table shows that the results are decidedly irregular, although the average score of the floated oysters is somewhat higher. Out of 21 pairs of samples, 12 showed higher scores, 5 lower scores and 4 no change in score after floating. No explanation can be offered at present for the few very high scores, on both fresh and floated oysters, which were obtained. Oysters taken from the same grounds, and floated in the same floats, on other days showed much lower scores.

It must be remembered, in attempting to interpret these results, that these samples were collected at the time of year when the B. coli content of oysters is at its height. The temperature of the water in which they were floated varied from 85° F. in September to about 60° F. toward the last of October. It is to be expected that much lower scores on both salt and floated oysters will be obtained later in the season when the hibernation period begins.

When attempts are made to interpret the above results of the examination of water and oysters in terms of the safety of the oysters for human consumption, difficulties present themselves. It must be remembered that B. coli is only an indicator of fæcal pollution, and not even an infallible indicator at that, and that a measure of the fæcal pollution in the river has no definite relation to the presence of the typhoid bacillus, which is the only organism about which we are much concerned. Unquestionably a considerable proportion of the B. coli found are of other than human origin, and, therefore, do not indicate the presence of possible typhoid bearing material. A recent examination of a small uninhabited watershed of a somewhat similar character to that of the Maurice River, shows that the water of the stream draining it contains B. coli uniformly in 1 c.c. samples and occasionally in 0.1 c.c., and a careful inspection of this watershed shows that the possibility of pollution by the excrement of man or domestic animals is so small as to be safely disregarded. Undoubtedly a considerable, though undeterminable, proportion of the B. coli found in the Maurice River at Bivalve may be derived from the sewage disposal plant at Millville, the effluent from which shows B. coli at times in high dilutions. It is difficult, until we have secured further information, however, to estimate with any degree of precision the danger to the oysters floated at Bivalve and Maurice River from this source. The distance from the plant to the uppermost float is about 24 miles. The river is both

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wide and deep and the dilution of the effluent is very great. Moreover, the river, being a tidal stream, does not flow steadily from the disposal plant to the floats, but the water washes back and forth with each tide, making actual progress down the river but slowly, and giving considerable opportunity for sedimentation. That sedimentation does occur is shown by the low turbidity of the river between Millville and Mauricetown, the river at the disposal plant being comparatively turbid. Just what value can be placed on this sedimentation cannot even be estimated, nor can the time it takes water from Millville to reach the floats be estimated without an extended series of stream measurements, which we have not yet been able to make, but it is quite evident, as a result of mere inspection, that the time which elapses must be considerable.

During the past season, a careful watch has been kept of typhoid fever cases on the watershed of the Maurice River. Very few cases have occurred; each one has been carefully investigated, and, with the exception of certain cases in Millville, dwelling in houses connected with the sewer, there has been no chance for infectious material from them to reach the stream. In the judgment of the writer, the danger of infecting oysters, floated at Bivalve and Maurice River, with typhoid bacilli derived from any locality in the immediate vicinity of these places is so small as to be negligible from a practical standpoint, and, while the danger from the Millville disposal plant, and other sources of pollution in the vicinity of that city, cannot at the present time be accurately estimated, it must be small, and will become much smaller when hypochlorite disinfection of the sewage is begun, which will be in the near future. The evidence thus far secured does not, in the judgment of the writer, warrant interference by the State Board of Health with the cultivation of oysters, as at present practised at Maurice River Cove.

Similar conditions to those existing in the Maurice River are found in the Cohansey, in which oysters grown on the Maryland shore are floated before shipment. This river has not yet been carefully investigated, and this will be done during the coming season.

A considerable oyster industry exists in Lake's Bay in Atlantic County. Lake's Bay lies east of Pleasantville and between that

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town and Atlantic City. Several apparent sources of pollution exist on the shores of the bay, and, toward the end of October, a number of samples of water and oysters were collected there. The results are shown in the tables which follow:

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TABLE 20.—RESULTS OF WATER

Sample number.	Date collected.	Hour collected.	Tide.	Weather.	Location.
L 55	Oct. 28	3:25 p. m.	Ebb	Fair	Lake's bay, 400 yards off shore at Bayview avenue, Pleasantville.
L 56	Oct. 28	3:40 p. m.	Ebb	Fair	One-quarter mile from Pleasantville shore off Ditch No. 6.
L 59	Oct. 29	9:00 a. m.	3 hrs. flood	Fair	Off mouth of Great Thoroughfare.
L 67	Oct. 29	12:00 a. m.	Flood	Fair	Off mouth of Turtle Gut.
L 68	Oct. 29	12:00 a. m.	Flood	Fair	Off lower mouth of Lake's channel.
L 69	Oct. 29	12:10 a. m.	Flood	Fair	Off Lake's channel entrance to bay.
L 73	Oct. 31	9:00 a. m.	3 hrs. flood	Fair	400 yards off Pleasantville shore off Ditch No. 2.
L 74	Oct. 31	9:05 a. m.	Flood	Fair	Near Lake's ditch channel.
L 75	Oct. 31	9:10 a. m.	Flood	Fair	600 yards from Lake's ditch channel.
L 76	Oct. 31	.....	Flood	Fair	100 yards from Lake's ditch channel.
L 77	Oct. 31	9:20 a. m.	Flood	Fair	Mouth of Lake's ditch channel.
L 78	Oct. 31	.....	Flood	Fair	Half way between Lake's ditch channel and Turtle Gut.
L 79	Oct. 31	.....	Flood	Fair	600 yards northwest of Turtle Gut.
L 80	Oct. 31	.....	Flood	Fair	Mouth of Turtle Gut.
L 81	Oct. 31	9:35 a. m.	Flood	Fair	100 yards southwest of Turtle Gut.
L 82	Oct. 31	9:45 a. m.	Flood	Fair	Lower mouth of Lake's channel.
L 83	Oct. 31	.....	Flood	Fair	400 yards east of Pleasantville, off ditch No. 9.
L 1	Oct. 25	9:30 a. m.	2½ h. flood	Fair	Basin near Verona Ave., Pleasantville.
L 47	Oct. 28	8:50 a. m.	5 hrs. flood	Fair	Basin near Verona Ave., Pleasantville.
L 53	Oct. 28	10:00 a. m.	High water	Fair	Basin near Verona Ave., Pleasantville.
L 54	Oct. 28	12:00 a. m.	2 hrs. ebb	Fair	Basin near Verona Ave., Pleasantville.

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ANALYSIS FROM LAKE'S BAY.

Presumptive test for B. Coli Communis. Lactose Bile.			Temperature °F.	Remarks.
1.0 cc.	0.1 cc.	0.01 cc.		
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
+	+	—	56	Heavy rain on 23d and 24th.
+	—	—	53.6	Ditch No. 1 empties into this basin.
+	—	—	.....	No. 1 receives considerable pollution.
—	—	—	.....	

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TABLE 21.—RESULTS OF ANALYSIS OF WATER TAKEN FROM

Sample number.	Date collected.	Hour collected.	Tide.	Weather.	Location.
L 2	Oct. 25	9:45 a. m.	2¾ hr. ebb	Fair	Ditch No. 1, 900 feet from mouth.
L 12	Oct. 25	11:50 a. m.	Ebb	Fair	Ditch No. 1, 300 feet from mouth.
L 13	Oct. 25	1:40 p. m.	Ebb	Fair	Ditch No. 1, 200 feet from mouth.
L 14	Oct. 25	1:40 p. m.	Ebb	Fair	Ditch No. 1, 300 yards from mouth.
L 15	Oct. 25	1:55 p. m.	Ebb	Fair	Ditch No. 1, near Franklin Ave.
L 16	Oct. 25	.....	Ebb	Fair	Ditch No. 1, 70 feet below tile pipe near head of ditch.
L 17	Oct. 25	2:10 p. m.	Ebb	Fair	Ditch No. 1, mouth of tile pipe near head of ditch.
L 72	Oct. 29	3:35 p. m.	Ebb	Fair	Ditch No. 1, 300 yards from mouth.
L 3	Oct. 25	10:05 p. m.	3 hrs. ebb	Fair	Ditch No. 2, just above oyster house.
L 4	Oct. 25	10:05 p. m.	Ebb	Fair	Ditch No. 2, just above oyster house.
L 10	Oct. 25	11:45 p. m.	Ebb	Fair	Ditch No. 2, just above oyster house.
L 11	Oct. 25	11:45 p. m.	Ebb	Fair	Ditch No. 2, just above oyster house.
L 18	Oct. 25	2:30 p. m.	Ebb	Fair	Ditch No. 2, branch of.
L 19	Oct. 25	2:30 p. m.	Ebb	Fair	Ditch No. 2, branch of.
L 20	Oct. 25	2:35 p. m.	Ebb	Fair	Ditch No. 2, same as L. 19.
L 21	Oct. 25	2:35 p. m.	Ebb	Fair	Ditch No. 2, same as L. 4.
L 22	Oct. 25	2:35 p. m.	Ebb	Fair	Ditch No. 2, same as L. 3.
L 23	Oct. 25	2:35 p. m.	Ebb	Fair	Ditch No. 2, just below oyster house.
L 25	Oct. 25	2:35 p. m.	Ebb	Fair	Ditch No. 2, just below oyster house, below L. 23.
L 26	Oct. 25	2:35 p. m.	Ebb	Fair	Ditch No. 2, 100 yards from mouth.
L 27	Oct. 25	2:35 p. m.	Ebb	Fair	Ditch No. 2, 100 feet from mouth.
L 48	Oct. 28	9:00 a. m.	6 hrs. flood	Fair	Ditch No. 2, just below oyster house.
L 49	Oct. 28	9:05 a. m.	Flood	Fair	Ditch No. 2, branch, just above oyster house.
L 50	Oct. 28	9:05 a. m.	Flood	Fair	Ditch No. 2, just above oyster house.
L 51	Oct. 28	9:30 a. m.	Flood	Fair	Ditch No. 2, branch, just above oyster house.
L 70	Oct. 29	3:30 p. m.	Ebb	Fair	Ditch No. 2, branch, just above oyster house.
L 71	Oct. 29	3:35 p. m.	Ebb	Fair	Ditch No. 2, branch, just above oyster house.
L 5	Oct. 25	10:15 a. m.	8 hrs. ebb	Fair	Ditch No. 3, 700 yards from mouth.
L 6	Oct. 25	10:30 a. m.	Ebb	Fair	Ditch No. 3, near oyster house.
L 7	Oct. 25	10:30 a. m.	Ebb	Fair	Ditch No. 3, just below oyster house.
L 28	Oct. 25	10:30 p. m.	Ebb	Fair	Ditch No. 3, branch of.
L 29	Oct. 25	10:30 p. m.	Ebb	Fair	Ditch No. 3, just below junction of branches.
L 30	Oct. 25	.....	Ebb	Fair	Ditch No. 3, 900 yards above oyster house.
L 31	Oct. 25	.....	Ebb	Fair	Ditch No. 3, 700 yards above oyster house.
L 32	Oct. 25	.....	Ebb	Fair	Ditch No. 3, just above oyster house.
L 33	Oct. 25	.....	Ebb	Fair	Ditch No. 3, just below oyster house.
L 34	Oct. 25	.....	Low water	Fair	Ditch No. 3, 150 feet from shore.
L 8	Oct. 25	10:50 a. m.	Ebb	Fair	Ditch No. 4, 200 feet from shore.
L 46	Oct. 26	.....	Ebb	Fair	Ditch No. 4, mouth.
L 9	Oct. 25	10:50 a. m.	Ebb	Fair	Ditch No. 5, 700 yards from shore.
L 45	Oct. 26	.....	Ebb	Fair	Ditch No. 5, mouth.
L 42	Oct. 26	.....	Ebb	Fair	Ditch No. 6, mouth.
L 43	Oct. 26	.....	Ebb	Fair	Ditch No. 6, just above oyster house.
L 44	Oct. 26	.....	Ebb	Fair	Ditch No. 6, just below oyster house.
L 57	Oct. 26	.....	Ebb	Fair	Ditch No. 6, 100 feet from mouth.
L 35	Oct. 26	9:00 a. m.	Ebb	Fair	Ditch No. 7, at oyster house.
L 36	Oct. 26	9:05 a. m.	Ebb	Fair	Ditch No. 7, 100 feet above oyster house.
L 37	Oct. 26	9:30 a. m.	Ebb	Fair	Ditch No. 7, just above road.
L 38	Oct. 26	.....	Ebb	Fair	Ditch No. 7, 10 feet above L. 37.
L 39	Oct. 26	.....	Ebb	Fair	Ditch No. 7, 25 feet from bay.
L 58	Oct. 26	5:00 p. m.	Ebb	Fair	Ditch No. 7, just above oyster house.
L 40	Oct. 26	.....	Ebb	Fair	Ditch No. 8, at oyster house.
L 41	Oct. 26	.....	Ebb	Fair	Ditch No. 8, at oyster house.

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DITCHES IN PLEASANTVILLE EMPTYING INTO LAKE'S BAY.

Presumptive test for B. Coli Communis. Lactose Bile.			Temperature ° F.	Remarks.
1.0 cc.	0.1 cc.	0.01 cc.		
+	+	+	54	Receives considerable pollution.
+	+	+	65	
+	+	+	.....	
+	+	+	.....	
+	+	+	.....	
+	+	+	77	
+	+	+	.....	
+	+	+	.....	B. coli in 0.001 cc., not in 0.0001 cc.
+	+	+	54	
+	+	+	53	
+	+	—	56	
+	+	+	54	
+	+	—	57	100 yards from bay.
+	+	—	.....	
+	+	—	.....	
+	+	+	57	
+	—	—	56	
+	+	+	.....	
+	+	+	.....	Nearly low water.
+	+	+	56	
+	+	+	56	
—	—	—	.....	
—	—	—	.....	
+	—	—	.....	
—	—	—	.....	100 yards above L. 49.
+	—	—	.....	Near low water.
+	+	—	.....	
+	+	—	54	
+	+	—	53	
+	—	—	53	
+	+	—	.....	
+	—	—	.....	
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	
+	+	—	56	
+	+	—	.....	
—	—	—	.....	
+	+	—	.....	
+	—	—	.....	
+	+	—	.....	
+	+	—	.....	
+	+	—	.....	
+	+	—	56	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
—	—	—	.....	
+	+	—	55	
+	+	—	.....	
—	—	—	.....	

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TABLE 21—CONTINUED—RESULTS OF ANALYSIS OF WATER TAKEN IN

Sample number.	Date collected.	Hour collected.	Tide.	Weather.	Location.
L 52	Oct. 28	9:30 a. m.	Ebb	Fair	Spring hole between No. 1 and No. 2.
L 60	Oct. 29	9:45 a. m.	Flood	Fair	Great thoroughfare near Lake's bay.
L 61	Oct. 29	9:50 a. m.	Flood	Fair	200 yards from L. 60.
L 62	Oct. 29	10:00 a. m.	High water	Fair	Great thoroughfare point called point of beach.
L 63	Oct. 29	10:15 a. m.	Ebb	Fair	Inner thoroughfare 300 yards off Atlantic City gas house.
L 64	Oct. 29	10:15 a. m.	Ebb	Fair	Patty's creek leading into Turtle Gut.
L 65	Oct. 29	11:00 a. m.	Ebb	Fair	Junction of Patty's creek and Turtle Gut.
L 66	Oct. 29	.....	Ebb	Fair	Turtle Gut, 300 yards west of L. 65.

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CHANNELS AND THOROUGHFARES AROUND LAKE'S BAY.—*Continued.*

Presumptive test for B. Coli Communis. Lactose Bile.			Temperature °F.	Remarks.
1.0 cc.	0.1 cc.	0.01 cc.		
—	—	—	.....	
—	—	—	.....	Point where tides meet.
+	—	—	.....	
+	—	—	.....	
+	—	—	.....	
+	—	+	.....	
—	—	—	.....	
—	—	—	.....	

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TABLE 22.—RESULTS OF OYSTER ANALYSIS TAKEN FROM LAKE'S BAY.

Sample Number	Date Collected	Approximate Number of Hours Floated	Presumptive test for B. Coli Communis Number of tubes showing gas			Score Based on 5 Oysters	SOURCE	REMARKS
			In 1.0 cc.	In 0.1 cc.	In 0.01 cc.			
S 74	Oct. 28	.....	0	0	0	0	One-half mile east of ditch No. 7	
S 75	" 28	.....	3	1	0	4	600 yards east of ditch No. 7	
S 76	" 29	.....	0	0	0	0	Near Turtle Gut	Clams
S 77	" 29	.....	5	0	1	14	Near lower end of Lake's channel	
S 78	" 29	.....	3	2	0	5	Near mouth of Great Thorofare	
S 79	" 29	.....	3	1	0	4	Near mouth of Turtle Gut	
S 80	" 29	.....	1	0	0	1	Inner Thorofare nr Atlantic City gas house	Clams
S 81	" 30	.....	2	0	0	2	Near Great Thorofare	
F 71	" 28	36	3	2	0	6	One-half mile east of ditch No. 7.	Floated in ditch No. 7
F 72	" 28	3 wks	5	2	0	23	200 ft. off Pleasantville shore of ditch No. 6	Floated in ditch No. 6
F 73	" 28	36	5	2	0	23	200 ft. off Pleasantville shore of ditch No. 6	Floated in ditch No. 6
F 74	" 29	.....	4	2	0	14	One-half mile east of ditch No. 7	Floated in ditch No. 7

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The ditches referred to in table are small, artificial ditches dug in the salt marsh which lines the edge of the bay. It is obvious that ditch No. 1 is considerably polluted, and an inspection of the vicinity shows that some of this pollution comes from domestic sewage from nearby properties, and is, therefore, dangerous. An oyster house is located in its waters. This ditch is probably unsafe as a place in which to float oysters. The oysters, of which only a few samples could be secured as the season was over, when considered from the standpoint of their B. coli content, do not appear to be objectionable. It is to be regretted that no oysters could be secured which had been floated in ditch No. 1.

The next most important point where oysters are grown is in Little Egg Harbor; these are floated in Tuckerton and West Creeks. So far as our investigations show, these oysters, and the waters in which they are grown, are above suspicion.

When the northern part of the state is reached, different conditions are found. Here the waters are more heavily polluted, and the pollution is of a more dangerous character. Our investigations in these sections have hardly been begun, and I am not, therefore, able to speak definitely of results, but it is obvious that oysters cannot be safely grown for market in waters known to be heavily polluted with sewage, and it is quite likely that our work in these waters, when completed, will result in the condemnation of several areas now used for oyster planting.

In conclusion, the writer desires to emphasize the difficulties in the way of securing reliable information about the probability of oysters being deleterious to health. We have absolutely no direct method by which this can be done. It is only by a most careful consideration of all the data which can be secured by sanitary surveys, extended over a considerable time, and bacteriological examination of very large numbers of samples, that even a roughly approximate estimate can be made of the sanitary quality of oysters. While a great deal has been said about the transmission of typhoid fever by oysters, yet the number of outbreaks which have been definitely traced to this source is not large, and, in so far as I am familiar with them, in each one it has been shown that the oysters were subject to the direct influence of *heavy* doses of comparatively fresh sewage.

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The commonly accepted indicator for sewage pollution is B. coli communis. The detection of the typhoid bacillus in water or oysters is attended by such difficulties that it is seldom undertaken in practice. The wide natural distribution of B. coli, and its constant occurrence in the intestines of animals other than man, make it absolutely unreliable as an indication of the presence or absence of the typhoid bacillus, and, therefore, in attempting to judge the sanitary quality of oysters, the B. coli score must be used with great caution or it will mislead. In the writer's judgment, much more useful information can be secured by careful and long continued sanitary surveys than by any bacteriological examinations whatever, although B. coli determinations, when considered in conjunction with sanitary surveys of a sufficient number of samples, which are used to minimize the large accidental errors of the method, are of some service when properly interpreted.

It is intended, during the coming year, to continue the collection of samples of oysters from the Maurice River section until the condition of these oysters is known; to make similar investigations at Greenwich Piers, where Delaware oysters are brought to be floated before shipment to market; to investigate conditions in New York Bay, the Raritan River, the Navesink and Shrewsbury Rivers, and to continue the investigations at Tuckerton and West Creek. When this is done, there still remains the oyster grounds of Atlantic and Cape May Counties, which are commercially of little importance, but difficult to investigate because of the shallow waters in which oysters grow.

It is hardly probable that the state can be satisfactorily covered in less than four years, but we hope to be able, during the coming year, to secure information which will justify the Board in condemning those grounds which are really polluted to such an extent as to render shellfish taken from them dangerous to health.

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Report of the Division of Sewerage and Water Supplies.

FRANCIS E. DANIELS, A. M., Chief.

The Board of Health of the State of New Jersey:

GENTLEMEN—I have the honor to submit the following report of the work of the Division of Sewerage and Water Supplies for the year ending October 31, 1912.

This Division is charged with the responsibility of protecting the public health by the supervision of sewerage and the public water supplies, and by the enforcement of the laws prohibiting pollution of the waters of the State.

A corps of technically trained men are constantly at work investigating the results of sewerage installations and water purification works, and making such recommendations as may be necessary to secure a proper sewage effluent on the one hand, or a safe potable water on the other.

There have been made 391 sewerage system inspections, and 357 special inspections of water supplies and watersheds during the year. Recommendations following these inspections have in many cases been gladly received, and improvements in results have been immediate.

Plans for 108 sewerage propositions have been approved, including 31 proposed sewage treatment works. In three instances activity toward proper sewage treatment has been accomplished by holding up the construction of sewer extensions. In one case the use of an unapproved sewer without disposal plant has been stopped by order of court.

There are at the present writing 114 sewage disposal plants in operation, with 17 under construction, of which 6 are being enlarged or altered to meet present requirements. In the detailed report of the disposal plants which occurs on another page a

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brief account of each is given. As stated last year, some are good, some are bad, and some are half way between. Poor results are due to bad management, overloading, bad location and bad design. Few plants in the State have poor design as this feature has been the most carefully considered. Overloading has been due to failure to increase the capacity of the works as soon as needed. Troubles from bad location have usually been due to failure to keep tide or brook water from backing up into the works. This usually puts part or all of the plant out of commission and poor results last for some time after the water has subsided.

The most serious defect in our sewage treatment works is the want of proper management and attention. In some cases we have endeavored to make adjustments in apparatus and have instructed the attendant, only to find upon return that this instruction had not been carried out and that the plant was again out of order.

I wish here to sound a word of warning against so-called aumatic apparatus. At Millville the automatic apparatus is practically worthless on account of the tide. At Ridgewood the automatic apparatus seems to be continually out of order. Sometimes the plant attendant is unfamiliar with the design of the apparatus and incapable of learning it. It is better not to have a control apparatus which will get out of order unless the attendant is capable of adjusting it immediately. Recently I found an automatic apparatus out of order. All four contact beds were full and overflowing, and the man at the plant supposed everything was going as it should.

On the other hand many plant attendants have taken interest in our instructions and are now making daily tests to satisfy themselves that good results are being obtained.

I am unable to report anything on the proposed ozone treatment of the sewage of Trenton as nothing further has been done.

During the year considerable work has been done in connection with the water supplies of the State, and every effort has been made to keep each supply up to standard.

At present 202 water companies, municipal or private, supply water to over two million people residing in 353 communities.

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In addition, water systems for 10 towns and plans for 4 municipal water filtration plants have been approved during the year.

The ground water supplies have not required much attention, although there are 12 filter plants for the removal of iron from ground waters. Several times B. coli was indicated in analyses. Upon investigation a leaky valve on the suction line or a leaky casing to a well was found and when this was corrected B. coli disappeared.

In two instances it was discovered that new wells were being connected to the main supply, and use was immediately prohibited until analyses had been made and passed upon. The pollution shown by the analyses was explained by the fact that in driving the wells the sand had been washed out with sewage polluted creek water. As soon as subsequent analyses showed the pollution had been removed the wells were passed.

There are 20 filtration plants for the removal of color, turbidity and bacteria from surface waters. These plants require careful and constant supervision and a more detailed account of this work is given elsewhere. Analyses of samples from these supplies are now made monthly instead of quarterly, and whenever the figures indicate poor results investigations are made immediately. Also 20 calcium hypochlorite plants, of which 10 have been installed during the year, are in use, either alone or in conjunction with filtration. A detailed account of the performance of one of these plants in stamping out a typhoid fever epidemic in Trenton, is given on page 419.

An emergency hypochlorite outfit has been fitted up and is kept in readiness to be shipped to any part of the State, and already it has been used at Lambertville, as noted in the description of that supply.

The 43 untreated surface supplies have received considerable attention during the year and all the watersheds have been gone over, and in some cases hypochlorite plants have been recommended.

Approval has been given to 7 new bottled water supplies, and 25 have been inspected and reported on. (See detailed report on Bottled Water Supplies.)

Our stream inspection force consists of 4 men who are also required to collect samples from public water supplies about one-

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fourth of their time. They, nevertheless, with the help of two temporary inspectors for two months in the summer, reported 1618 new stream pollutions and made 1841 reinspections. In addition they served a number of notices and made special inspections and reports on watersheds and bottled water supplies.

As a result of the inspections, 970 notices have been issued and upon reinspection, 876 pollutions have been found abated and 168 cases have been referred to the Attorney-General. The remainder of the cases have been held, pending the installation of some nearby sewerage system, or to await the outcome of some legal complication.

The Phillipsburg case, which has not yet been argued, is blocking effective litigation, and most of our results have been due to the cooperation of our better class, and more enlightened citizens.

The attitude of our citizens in regard to pure water and sewage disposal is more favorable every year.

Prior to this year our office statistics concerning sewerage systems and water supplies were very scant and inaccessible. These have now been compiled with new information on cards, so that all the essential features concerning any sewerage system or water supply in the State can be found in an instant.

Chapter 317, Laws of 1912, printed elsewhere, provides a penalty of $100.00 for turning on polluted water without notifying the health authorities. This is a good law and just before its passage raw water was by-passed the filters of Rahway for about two days. No notice was given and it is believed by some that the subsequent cases and deaths from typhoid fever were caused by that act. Since then when it became necessary to pump canal water at Lambertville the health authorities were notified. The Water Company warned the consumers and we treated most of the water with hypochlorite and so far as known, no bad effects have resulted from the use of this water. Recently the Water Department of Gloucester by-passed the filters and pumped polluted creek water, untreated, into the distribution system, without any notice whatever to the health authorities. This was a flagrant violation of the law.

All water companies and departments have been furnished with copies of this law and all by-passes are being sealed as fast as located.

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A great deal of annoyance and delay is often caused by insufficient data and non-uniformity of engineering plans submitted for approval. A large number of requests from engineers for a circular of requirements have been received, and a small pamphlet of rules for the submission of plans for sewerage and water supplies, has been carefully prepared. This is similar to those published by other States, and by other departments of this State, and while it has been ready since January, 1912, and repeated efforts have been made to have it printed, the Board has not yet allowed it.

The laboratory work, on account of lack of room, has been confined to routine work only, and to make further comments would be to repeat what I said last year.

In 1908 there were analyzed in the laboratory 670 samples of water and sewage, while in 1912 we analyzed 3169 samples of water and sewage. Reports of these analyses are mailed not later than four days after receipt of sample.

In addition to the public supplies, analyses are made of samples of private supplies for local health officers. During the year samples have been sent in by health officers, concerning which information has been withheld, and the real purpose of the analysis has been refused. When this is the case the samples are emptied into the sink. Samples of sewage have been sent in under the name of potable water. These were unfit for analysis when received. Hereafter any one requesting a container should state what kind of sample is to be taken and the purpose of the analysis.

In order to maintain the present standard of efficiency and to improve further the work of this Division, three very evident needs stand forth, namely:

1—Increased laboratory facilities.
2—Larger force of trained assistants.
3—A sewage experiment station.

The following is a short summary of the work pertaining to this Division accomplished during the year:

Water-supply inspections	310
Water-supply watershed inspections	47
Sewerage system inspections	391
Water-supply plans approved	24
Water-supply plans disapproved	2
Sewerage plans approved	108

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Sewerage plans disapproved	11
Bottled water-supplies approved	7
Bottled water-supplies disapproved	4
Number of stream pollutions reported	1,618
Number of reinspections of stream pollutions made	1,841
Number of stream pollutions found abated	876
Number of notices to cease pollution issued	970
Number of pollution cases referred to the Attorney-General	168

Samples analyzed from:

Public water supplies	1,676
Private water supplies	626
Proposed public water supplies	34
Bottled water supplies	44
State Institution water supplies	56
Dairy water supplies	32
Miscellaneous sources	308
Sewage effluents	393
Total	3,169

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Engineering Work.

CHESTER G. WIGLEY, C. E., ASSISTANT ENGINEER.

Mr. F. E. Daniels, Chief, Division of Sewerage and Water Supplies, Board of Health of the State of New Jersey, Trenton, New Jersey:

DEAR SIR—I respectfully submit the following report, relative to the engineering work of this Division for the fiscal year ending October 31, 1912:

From an engineering standpoint, the past year has been a particularly busy one for the Division of Sewerage and Water Supplies. The following brief summary will give some idea as to the amount and character of this work:

There have been 91 applications for extensions to existing sewer systems, which are under the jurisdiction of the State Board of Health.

Plans for 31 proposed sewage disposal plants, and 16 proposed sewer systems have been investigated and approved.

There have also been approved 10 water supply systems and 4 water filtration plants. One filtration plant of 3,000,000 gallons capacity has been constructed.

During the year the following disposal plants have been completed and put in operation: Browns-Mills-in-the-Pines, Englewood, New Lisbon, (Burlington County Asylum), Ocean City, Rumson and Skillman, (State Village for Epileptics.)

At the present time there are 17 disposal plants and 10 new sewer systems under construction. At six places alterations of an extensive nature are being made to sewage disposal plants, which have been in service for several years, and have become inadequate.

The sewer extensions mentioned above as having been approved were for the following places: Asbury Park, Beach Haven, Bound Brook, Burlington, Camden, Collingswood, Deal, Fort Lee, Garwood, Hackensack, Long Branch, Madison, New Brunswick, Phil-

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lipsburg, Plainfield, Princeton, Rahway, Red Bank, Roebling, Somerville, South Orange Township, Summit, Trenton, Westfield and Woodbury.

The disposal plants which have been approved during the last year range in capacity from a 10,000 gallon per 24 hours creamery plant to a 20,000,000 gallon joint disposal plant for three large municipalities. Of these disposal plants, 16 are for places which have been ordered to purify the sewage. The other 15 places of their own initiative, contemplate the construction of complete sewer systems, and sewage disposal plants. This shows an admirable attitude of the people of the State in aiding to better general conditions of health and life.

The following places have had sewage disposal plants approved without having been placed under orders:

Place	*Plans approved.*
Audubon	April 2, 1912
Beverly	August 20, 1912
Caldwell	July 16, 1912
Montclair, Orange & East Orange	August 27, 1912
Fairview	June 11, 1912
John Lucas Co. (Gibbsboro)	June 4, 1912
Bateman Mfg. Co. (Grenloch)	August 20, 1912
Hasbrouck Heights	January 9, 1912
Lakewood	August 20, 1912
Union County Tuberculosis Sanatorium	June 11, 1912
Penns Grove	August 27, 1912
Secaucus	April 29, 1912
Sharptown Creamery	July 30, 1912
South Bound Brook	August 6, 1912
Oaklyn Realty Co.	August 27, 1912
West Englewood	August 20, 1912

According to law, all new sewers must be approved by the State Board of Health, unless such sewers are extensions to existing sewerage systems, built prior to 1900, and upon which no order to treat the sewage therefrom has been placed. The law also requires that all new outlet sewers must be approved by the Board. Unfortunately, this law is not always adhered to by the parties constructing the sewers, and for this reason it was found necessary during the past year to secure an injunction against parties who had constructed sewers without the consent of the Board of Health of the State.

There have been during the year numerous applications for advice as to the proper disposal of wastes from private properties. In

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response to these requests plans of three typical disposal plants for dwellings have been prepared. The first of these plans consists of a settling basin and a leaching basin, and is adaptable to conditions in the sandy soils of this State, where there is no opportunity for polluting wells and other sources of water supply. The second type of plant consists of a settling basin, siphon chamber and subsurface irrigation system. This system is useful in all sections of the State for the larger sized dwellings and small institutions. The third type of plant consists of a sedimentation basin, dosing chamber, distributing system and sand filters.

Unfortunately, the Division is not able to investigate personally all the private propositions for which plans are requested. For this reason the people are advised to employ some engineer to study and design works whenever it is possible. Advice has also been given on one or two occasions to groups of houses, as an illustration of which the following instance possesses some unusual features:

At Grassy Sound a whole street of cottages has been built upon piles ranging from 4 to 6 feet above the salt water marshes and about 1 to 2 feet above extraordinary high tides. This unusual condition of affairs called for some special methods of collecting and treating the sewage.

"A pail system could be installed at this place, in which the fæcal matter would be discharged into tight buckets and covered with dry earth, ashes or lime. Periodical collections from these privies would have to be made and the material disposed of on land. The chief objection to this method is the difficulty of maintaining it in proper sanitary condition. It also does not make provision for wash water, sink drainage and slop water in general.

"It would also be possible to construct a wooden drain or pipe, supported on piles or suspended from the boardwalk. This pipe could then be carried to a central disposal plant where the sewage might receive treatment in a sedimentation basin and be disinfected with a solution of hypochlorite of lime. It would, in this case, be necessary to provide water to carry the sewage to the plant. A system, composed of a pump operated by a windmill, might be used to flush the privies and carry the wastes to the main sewer.

"The most economical method of disposal for the houses situated on the east side of the sound would be for each house to have its own hypochlorite sewage treating plant, which might be readily constructed of hogsheads or barrels. The chief objection to this

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system would be the dangers incident to improper maintenance. A joint disposal plant, as described above for the east side, would greatly eliminate this factor."

It can be seen that the above conditions, under which a sewer system would have to be constructed were rather unusual.

Besides the requests for information concerning the disposal of domestic sewage there have been numerous requests for information concerning methods of disposal for the following trade wastes: Laundry waste water, waste water from a wheat starch manufacturing plant, wastes from illuminating gas plants, rubber washing waste water, wastes from wall paper factories, tannery wastes, iron pickling liquors, and wastes from creamery plants.

Where a connection to a sewer system is impossible, the treatment depends upon the specific character of each waste discharged. Usually the treatment consists of the addition of a chemical, generally lime, a period of sedimentation and, in the case of creamery plants, sand filters are often provided.

Besides the work in sewage there has been considerable activity during the past year in the construction of water work systems. Water systems for ten towns and plans for four municipal water filtration plants have been approved during the past year. There has also been constructed at Bridgeton a water filtration plant, having a capacity of 3,000,000 gallons per day. The plant, however, has not yet been put in operation.

Water works for the following places have been approved during the year:

PLACE.	COMPANY.	WATER WORKS CONSIST OF	PLANS APPROVED.
Collingswood	Municipal supply	Water supply system	March 12, 1912
Gladstone	Bedminster Water Co	Water supply system	Aug. 20, 1912
Glen Gardner	State Tuberculosis Sanetorium	Water filtration plant	Oct. 22, 1912
Milltown	Municipal supply	Water supply system	July 9, 1912
Ramsey	Municipal supply	Water supply system	March 26, 1912
Sewell	Sewell Water Co.	Water supply system	Jan. 9, 1912
South Orange	Municipal supply	Partial water supply system	March 19, 1912
Stanhope	Municipal supply	Water supply system	July 9, 1912
Trenton	Municipal supply	Water filtration plant	Oct. 22, 1912
Woodbury	Municipal supply	Water filtration plant.	June 25, 1912

The largest of the water filtration plants is the one designed for treatment of 30,000,000 gallons of water per day at the city of Trenton. The Commissioners of that city are to be complimented upon instituting proceedings, which will in the near future cause to be

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supplied to the city a water suitable for both domestic and manufacturing purposes. There is no doubt but that this action will result in a decided betterment of health conditions within the city. It will also save a large amount of money to householders who have been compelled to buy bottled waters from some ten prosperous spring water companies. During periods of high water in the Delaware River the demand for bottled water sometimes has been so great that the companies were unable to meet it. The installation of this water filtration system will, without the least doubt, greatly aid the progress and growth of the city in many ways.

Besides the complete water filtration plants constructed there have been approved and installed 10 hypochlorite plants for the purpose of disinfecting the water supplies.

A more complete account of these installations will be found in the account of the several water works.

At the present time, plans and drawings of all dimensions and scales are submitted, sometimes without any accompanying report giving information and data upon which the designs are based. The various sized drawings cause some difficulty in filing. The absence of reports and available data is, however, the most serious defect as it generally means the acquisition of the information by some representative of the Division, and thus causes a considerable loss of time before the plans are approved. Engineers would greatly facilitate the work of the Division in this respect if reports giving the necessary data were filed with the plans.

It has been found necessary to place several new towns under orders to cease polluting the waters of the State and extensions of time have in a few cases been granted to places already under the orders of the Board.

A revised and corrected list of the places which have been ordered to cease the pollution of the waters of the State follows:

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Place.	*Ordered to cease pollution prior to*	*Sewage disposal plans approved.*
Atlantic City (main outlet)	February 1, 1914.	Submitted.
Atlantic Highlands	June 1, 1911.	May 11, 1909.
Avalon	June 1, 1912.	August 8, 1911.
Beach Haven	January 1, 1913.	January 30, 1912.
Belvidere (private sewer)	October 1, 1907.	
Referred to Attorney-General.		
Blairstown	October 1, 1907.	
Referred to Attorney-General.		
Bogota	January 1, 1914.	
Bound Brook	July 1, 1913.	
Camden	September 1, 1913.	
Cape May	May 1, 1913.	
Cranford	October 10, 1912.	
Delford	January 1, 1914.	
East Bound Brook	July 1, 1913.	June 4, 1912.
Gloucester	September 1, 1913.	
Hackensack	January 1, 1914.	Submitted.
Highland Park	January 1, 1913.	
Hightstown	January 1, 1913.	August 8, 1911.
Jersey City (part of)	May 1, 1908.	
Referred to Attorney-General.		
Leonia (three sewer companies)	January 1, 1914.	
Long Branch	May 1, 1909.	
Longport	June 1, 1913.	May 14, 1912.
Mount Holly	July 1, 1912.	June 13, 1911.
New Brunswick	July 1, 1912.	January 24, 1911.
North Wildwood	June 1, 1912.	
Oaklyn (private sewer)	October 1, 1912.	November 9, 1909.
Preliminary injunction granted.		
Phillipsburg	October 1, 1907.	
Case being tried.		
Rahway	October 10, 1912.	
Raritan	September 1, 1913.	
Red Bank	May 1, 1909.	August 20, 1912.
Ridgefield	January 1, 1914.	
Ridgefield Park	January 1, 1914.	
River Edge	January 1, 1914.	
Riverton	September 1, 1913.	July 25, 1911.
Seabright	June 1, 1911.	
Sea Isle City (private sewers)	November 1, 1911.	
Seaside Park	June 1, 1913.	
Somerville	September 1, 1913.	
South Amboy	January 1, 1913.	
Sussex	October 1, 1914.	
Trenton	January 1, 1913.	
West Collingswood	September 1, 1909.	
West Hoboken	May 1, 1908.	
Referred to Attorney-General.		
Wildwood	June 1, 1912.	
Wildwood Crest	June 1, 1912.	May 9, 1912.
Woodbridge	June 1, 1914.	
Woodlynne	July 1, 1910.	May 18, 1909.
(Under injunction.)		

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It will soon be necessary to place several other places "under orders." The owners of practically every sewer system discharging into inland streams without treatment will then be under orders to install a treatment system.

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Sewage Disposal Plants and Sewers.

WM. J. ORCHARD, B. S. FIELD, ASSISTANT.*

Mr. F. E. Daniels, Chief, Division of Sewerage and Water Supplies, Board of Health of the State of New Jersey, Trenton, New Jersey:

DEAR SIR—I beg to submit the following report on the sewage disposal plants in the State of New Jersey for the fiscal year ending October 31, 1912:

During the past year several new plants have been constructed and put in use, making a total of 114 disposal plants now in operation in this State. This report gives a description of the new plants and of changes in the old ones, and also, so far as it is known, a statement of the present condition of all of them.

A résumé of the actions of the Board relative to sewers and sewage disposal plants is also given:

ALDENE.—Watson-Stillman Company. The sewage disposal plant serving the factory of the Watson-Stillman Company has been described in the State Board of Health Report for 1911, page 315.

The plant was inspected on August 1, 1912, and found to be in very good condition.

An automatic centrifugal pump, with a 2-inch delivery, directly connected to an electric motor, has been installed for use during the summer months while the steam boilers are not in operation.

ALLENHURST.—The Allenhurst sewage disposal plant has been described in the State Board of Health Report for 1911, page 315.

This tank was inspected on May 29, 1912, and found to be in very good condition. It was cleaned out in March, the accumulated solids being forced out by means of two lines of fire hose working under high pressure.

*This report was prepared up to September 1, 1912, by former Field Assistant, C. N. Harrub, B. S.

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ASBURY PARK.—Ross-Fenton Farm. The sewage disposal plant at the Ross-Fenton Farm has been described in the State Board of Health Report for 1911, page 315.

This plant was inspected on November 13, 1911, and was reported to be in a satisfactory condition.

ASBURY PARK.—The Asbury Park septic tank and pumping plant has been described in the State Board of Health Report for 1909, page 227.

On the 20th of February, 1912, the Board approved plans of changes to be made in the sewage pumping plant and a new system of distributing pipe has been placed in the septic tank, and new screens put in. These are iron bar screens, bars spaced one-half inch apart. These new screens are not used, as a pipe has been carried through the screen chamber to the pump chamber, where it is connected by flanged tees directly to the centrifugal pumps. The automatic cut-in is now operated from a float chamber, a little distance back on the sewer. By this means the nuisance formerly caused by odors from the screen chamber has been entirely eliminated.

Proposed extensions for the sewer system were approved by the Board on April 9, 1912.

Inspections were made on November 1 and 13, 1911, February 27, and May 28, 1912. At the latter inspection these changes had been completed, and although the effluent from the tank was quite turbid there was no nuisance caused by the plant.

ASYLA.—Camden County Institutions. The sewage disposal plant serving the Camden County Institutions at Asyla has been described in the State Board of Health Report for 1909, page 228.

Inspections of this plant were made on November 20, 1911, and February 23, 1912, and it was reported that there were several bad leaks at different parts of the piping system; that the planking around the beds was rotting away, and that the beds needed re-grading.

As a result, motion was made and carried at the Board meeting on March 5, 1912, that a communication be sent to the Board of Freeholders of Camden County, requesting them to remedy these conditions. A re-inspection on May 20, 1912, showed the recommended improvements to have been made, the plant being reported to be in better condition.

Further inspection was made on September 10th, and at that time the distribution on the beds was very poor and the plant needed a general overhauling. The effluent was cloudy and decolorized methylene blue in less than two days. A letter was written to the solicitor of the Board of Freeholders, requesting that the attention of the County Engineer be called to the conditions existing at this plant, with a view to improvement.

ATLANTIC CITY.—The disinfection plant for treating the sewage of the Chelsea district of Atlantic City has been described in the State Board of Health Report for 1911, page 316. Inspections were made on March 11th and July 22, 1912. In both cases the disinfectant was being added, but bacterial determination showed an unsatisfactory removal of bacteria.

At a meeting of the Board, held December 19, 1911, the Atlantic City Sewerage Company was given until February 1, 1914, to install a sewage disposal plant. At a meeting of the Board on August 27, 1912, all persons residing along the Thoroughfare were given until February 1, 1914, to discontinue polluting the waters of the Thoroughfare.

ATLANTIC HIGHLANDS.—Plans were approved by the Board on May 11, 1909, for a septic tank to treat the sewage of the Borough of Atlantic Highlands. On the 17th of September, 1912, by vote of the Board a communication was sent to the local authorities, asking why the disposal plant had not been installed.

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AUDUBON.—Plans were approved by the Board at a meeting held April 2, 1912, for a sewerage system and a sewage disposal plant for Audubon. The plans for the disposal plant call for a settling tank, siphon chambers and sprinkling filters.

AVALON.—At a meeting of the Board held January 9, 1912, amended plans for a sewer system for Avalon were approved.

AVON.—The septic tank at Avon is described in the State Board of Health Report for 1909, page 229.

The tank was cleaned in April, 1912, and at inspection on June 17, 1912, was found to be in a satisfactory condition.

AVON.—Kling's Boat-house. At some time during the past year a small septic tank was built at the place known as Kling's Boat-house. The tank is situated under one corner of the house and is completely surrounded by water. The septic effluent is discharged directly into Shark River.

BAYONNE.—Permission was given by the Board at a meeting on January 9, 1912, to the American Radiator Company to lay a sewer to discharge sewage from their plant at Bayonne into New York Bay without purification of the sewage, with the understanding that when others are ordered to put in plants for the purification of sewage in this vicinity, this Company must do so also.

BEACH-HAVEN.—Amended plans for a sewage disposal system for Beach Haven, consisting of ejectors, wells, and sedimentation tanks, were approved by the Board on January 30, 1912. Plans for extensions to the sewer system were approved April 2, 1912, and at a meeting of the Board on June 25, 1912, the Board granted an extension of time to the Borough until January 1, 1913, in which to install the proposed disposal plant.

BELMAR.—The septic tank at Belmar is described in the State Board of Health Report for 1911, page 317. Inspections were made on November 2nd and December 13, 1911, and serious leaks from the outfall pipe were reported

An inspection on June 17, 1912, showed that several new sections of pipe had been put in the outfall, thus preventing any further leakage.

Further inspections were made on September 4, 1912, and October 5, 1912, and the tank was reported in satisfactory condition.

BEVERLY.—Amended plans for a sewerage system for Beverly and sewage disposal works, consisting of sedimentation tanks and disinfecting chambers, were approved by the Board on August 20, 1912. An inspection of the work was made on September 12, 1912, and it was reported that construction was well under way and that one and a half miles of sewers had already been constructed.

BORDENTOWN.—The sewage disposal plant at Bordentown is described in the State Board of Health Report for 1910, page 363.

Inspections were made on January 11, March 5, April 25, June 27, July 9, September 6, and October 7, 1912.

At the inspection on January 11th it was found that some trouble had been experienced with the secondary contact beds on account of the dose from the primary beds not filling them sufficiently to operate the discharge siphons. To overcome this difficulty and also to increase the available capacity of the primary beds, the division walls in the regulator house, and the aerlock system were raised eight inches above its original elevation.

In April it was found that the sand beds were not draining properly. The trouble was due to the method of laying the underdrains. These were dug up and properly relaid, six additional one-inch holes being bored in the under side of each length of pipe before replacing it. The action of the beds was materially improved by this work.

In June it was found that the shear gates which regulated the dosing of the sand beds were not tight and permitted a small stream of sewage to flow

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continuously on two of the beds. These gates were replaced in September by new gates of a very simple but remarkably effective design, which prevented further leakage.

The aerating weir has been raised eight inches to give more head and, therefore, better distribution on the sand beds. New sand has been placed on two of the beds and the sand beds should now remain in very good condition.

The siphons controlling the discharge of the secondary contact beds were found to be inoperative at the September inspection. These siphons are to be adjusted as soon as the work now going on in connection with the installation of new pumps in the pump house in the low portion of the town is completed.

BOUND BROOK.—At a meeting of the Board held on April 23, 1912, the Borough of Bound Brook was given an extension of time to July 1, 1913, in which to discontinue pollution of the Raritan River.

The Board, at the meetings held June 4, 25, and August 6, 1912, approved the various plans for the extension of the sewer system.

BRADLEY BEACH.—The septic tank serving the northerly portion of Bradley Beach has been described in the State Board of Health Report for 1911, page 317.

Inspections were made on November 14 and December 12, 1911, and on May 29 and June 17, 1912, and the tank was reported in good condition on both occasions.

On August 20, 1912, it was reported to this office that this tank was not operating properly, but was allowing large solids to pass directly through to the outlet, whence they drifted back on the beach. Accordingly, a thorough investigation was made on August 21, 1912. Several samples of the effluent were taken for examination, and although all were quite turbid there were no large pieces of floating solids present.

During the past year another septic tank has been constructed at Evergreen and Ocean Avenues, to serve the southerly portion of the Borough. This tank consists of two compartments, 40 feet by 10 feet by 6 feet deep at the inlet end, and 5 feet deep at the outlet end, the floor sloping to an eight-inch sludge drain at the lowest point of the tank.

Inspections were made November 14, 1911, and June 17, 1912. At the time of the November inspection the actual construction of the tank had not started, the excavation just being under way. When inspected on June 17, 1912, the plant was completed and in operation. There are few houses contributing to this tank and it is in good condition.

BRIDGETON.—The two hypochlorite disinfection plants for the treatment of the Bridgeton sewage are described in the State Board of Health Report for 1911, page 317.

Inspections were made on November 22, 1911, and on January 25, 1912, and the plants were reported not in operation. The sewage was, however, passing through the Water Street plant, but no hypochlorite was being added. As a result of these inspections the Bridgeton authorities were notified, by vote of the Board at a meeting on January 30, 1912, that they must have their disposal plant in operation before February 1, 1912. An inspection on February 28, 1912, showed that about 20 pounds of hypochlorite was being used per day at the Water Street plant. The sewage was not yet turned into the Glass Street tank. The authorities were then ordered by vote of the Board on March 5, 1912, that they must take action to put both plants in efficient operation at once. The plants were again inspected on March 28th, and both found to be in operation, the regulation of the hypochlorite feed, however, was very poor. This same condition was also reported after an inspection on July 2nd, and the authorities were instructed to attend to the regulation of this feed so as to prevent the supply running out and the sewage then passing through the plant untreated for a time.

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Further inspections were made on October 17 and October 25, and on both of these occasions it was found that the disinfectant was applied for only a small portion of the day. At the last inspection the tanks were regulated and directions given to the attendant to insure constant applications of the hypochlorite.

A low level siphon pipe under Cohansey Creek was broken by a U. S. dredge during the winter and as yet has not been repaired.

On account of these conditions the authorities of Bridgeton were notified, by vote of the Board at a meeting held October 29, 1912, that the hypochlorite must be added to the sewage continuously, and that the tanks should be visited by an attendant at least twice a day to insure proper operation. The local authorities were also ordered to repair the broken siphon pipe under Cohansey Creek at once.

..BROWN'S-MILLS-IN-THE-PINES.—During the past year a new sewage disposal plant has been constructed to treat the sewage from The Inn and a few other houses. The plant consists of screens, sedimentation chamber, primary contact beds and disinfection by hypochlorite of lime.

The sewage first passes through a screen chamber, 3 feet by 4 feet inside, in which is a vertical screen, 3 feet, 10 inches long by 2 feet high. The screen is made of one-half inch by three-quarter inch bars, spaced one-half inch apart. After passing the screen, the sewage enters the sedimentation tank through a six inch pipe, which discharges about 3 feet below the flow line. This tank is 9 feet by 12 feet, 6 feet deep at the inlet end and 7 feet deep at the outlet end, with a weir extending the entire width of the tank. There are no baffles in the tank, but a scum wall of 2 inch plank is placed 3 inches back from the outlet weir. This scum wall extends about 3 feet, 8 inches below the level of the liquid.

The contact beds are automatically alternated, the dosing being controlled by the aerlock system, which is situated in the regulating chamber, between the sedimentation tank and the contact beds. These beds are 15 feet by 20 feet, with a small space, 3 feet, 9 inches by 7 feet, 6 inches in one corner of each taken for the automatic discharging siphons. The sewage is applied to the beds through a main distributor, 8 inches wide and 4 inches deep, and four branch distributors, 4 inches wide and 4 inches deep.

The beds are filled with 3 feet of broken stone, underdrained by four lines of 3 inch terra cotta pipe, which discharge into a 6 inch main collector, also terra cotta, and two lines of 3 inch pipe, which drain directly to the siphon chamber. Eight ventilators, located over the ends of the underdrains, are placed in each bed.

The automatic discharging siphons discharge into a channel leading to the disinfection tanks, two in number. Each disinfection tank consists of two chambers, each 7 feet square, with a 12 inch weir in the divison wall. These disinfection tanks may be used individually or both together as a single unit.

The apparatus for feeding the disinfectant consists of a mixing tank, 24 inches in diameter, having a capacity of 58 gallons. This discharges into a constant head tank of like diameter and capacity, which in turn delivers the solution to the contact effluent as it enters the disinfection tanks. The amount of solution fed is automatically regulated by a copper ball float in the channel from the contact beds

All masonry is of concrete, the house over the disinfection tanks and regulating siphons being a frame structure.

A high degree of purification is required at this plant as the effluent is discharged into Rancocas Creek, which is used as a source of water supply by Mount Holly a few miles below.

Inspections were made on December 1, 1911, February 29, March 16, and the plant was reported not completed at each visit. On May 15 another inspection was made and the plant was found to be in readiness for operation.

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The hypochlorite feed had been given a trial run, but as The Inn was closed for the season, and as no sewage was coming to the plant, no disinfectant was being used.

BURLINGTON.—The sewage disposal plant serving the City of Burlington, consisting of settling tank, and land filters, has been described in the State Board of Health Report for 1909, page 230. Inspections were made November 5 and December 18, 1911; March 1, April 8, May 24, July 11, September 4, and October 19, and each time the plant was reported in a very unsatisfactory condition. The stone barriers at the upper end of the beds were badly clogged, the filters were in very poor condition, and breaks through to the underdrains allowed unpurified sewage to escape from the surface of the beds to the effluent channel.

Although the Company is under orders to put their plant in good condition and promises of improvements have been made, little has been done. They have, however, replaced one of the old pumps with a new and larger one, and at the October inspection the plant was found in a little better condition but still far from satisfactory, and giving very poor results.

At a meeting of the Board, held August 27, 1912, plans for an extension to the sewer system of Burlington were approved.

BURLINGTON.—Thomas Devlin Manufacturing Company. This plant, consisting of septic tank, sprinkling filter, settling tank and sand filters, is described in the State Board of Health Report for 1909, page 231. Inspections were made on March 1, April 8, May 24, and July 11, 1912. In every case the plant was reported in bad condition. This state of affairs was pointed out to the engineer for the Company, and he has promised to see what can be done to keep this plant in proper condition.

The pump was found out of commission several times and in March the siphon in the dosing tank, the sprinkling filter distributors and supply lines to the sand filters were frozen and out of service, and the sewage after flowing directly through the sprinkling filter ran into the swamp at the side of the plant. At a later inspection the siphon and sand filter supply lines were found to be all right, but the distributors on the sprinkling filter were still broken.

At the September inspection it was found that a new primary storage basin, or gravity well, had been added to the plant in order to prevent the pump well overflowing. This well is built of brick, with a concrete base, is cylindrical in shape, 12 feet in diameter and 14 feet deep, and divided into halves by a 9 inch brick wall. This wall is fitted with screens, there being three sets fitted on slides so that they can be lifted out and cleaned when necessary. These screens are made of cast iron plates, thirty inches square and one inch thick, and are perforated with one-and-one-quarter inch holes, spaced two-and-one-half inches on centers. Each set of screens consists of two of these plates, one resting on the other. This combined well and screen chamber is a very helpful addition to the plant. The sprinklers were all found to be in good shape and the general condition of the plant was much more satisfactory.

At the October inspection the stone of the sprinkling filter was found to be very dirty and in need of cleaning. The plant is to receive a general overhauling in preparation for the winter and the construction of a new and properly underdrained sludge bed is under consideration.

BUTLER.—At a meeting of the Board, held November 21, 1911, notice was given those in charge of the Bancroft Health Resort, at Butler, that some temporary arrangements must immediately be made to take care of the sewage from said resort, to prevent stream pollution; and that plans for a sewage disposal plant could be presented at a later date.

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CALDWELL.—Plans for a sewer system and sewage disposal plant for Caldwell were approved by the Board at a meeting, held July 16, 1912, subject to the construction of an additional septic tank when required and subject to the removal of underground inlets to the sewer manholes.

CALDWELL.—Caldwell Steam Laundry. The disposal plant for treating the waste from the Caldwell Steam Laundry consists of a receiving tank for the detention of solids and a filter, the effluent of which enters the brook. This filter consists of a ditch about four feet wide and four feet deep, and thirty feet long, filled with small stone and gravel.

Inspections were made on April 22, July 19, and September 16, 1912. In all cases the plant was found to be seriously polluting the brook. Requests have been made to the Laundry Company that they put their disposal plant in such condition that it will not pollute the waters of the State, or the matter will be referred to the Attorney-General. In view of the fact that a sewerage system and disposal works, plans for which are already approved by the State Board of Health, are soon to be built in the Borough, which will take care of the wastes from the laundry, it has not been considered fair to the Laundry Company to require them to install a new disposal plant.

CALDWELL.—Essex County Penitentiary. The sewage disposal plant serving the Essex County Penitentiary, consisting of septic tank, and ground absorption system, is described in the State Board of Health Report for 1909, page 231. Inspections were made on December 8, 1911, April 23, July 19, and September 24, 1912. In every case the plant was reported in excellent condition, and gave every indication of having had careful attention..

CAMDEN.—Various extensions to the sewers of Camden were approved by the Board at meetings held January 2, April 23, July 9, July 30, and October 1, 1912, subject to the notice given by the Board to the City of Camden to cease polluting the Delaware River prior to September 1, 1913.

CAPE MAY.—At a meeting of the Board held on May 21, 1912, the case relative to the failure of Cape May City was referred to the Attorney-General for action. At a meeting held on October 1, 1912, the solicitor for Cape May City, appearing before the Board, presented a copy of the agreement for the purchase of a site for the sewage disposal works of said City, and it was agreed that complete plans for said works would be in the hands of the Board by December 1, 1912, and that the plant would be constructed and in operation on or before May 1, 1913.

CARLSTADT.—The septic tank serving the Borough of Carlstadt is described in the State Board of Health Report for 1910, page 363.

CHANGEWATER.—Hopatcong Woolen Mills.—The sewage disposal plant, consisting of septic tank and sand filters, for treating the sewage of the Hopatcong Woolen Mills, has been described in the State Board of Health Report for 1910, page 364.

Inspections were made on August 16 and September 18, 1912. At the last inspection the plant was found to be in a very satisfactory condition and turning out a clear and non-putrescible effluent.

CHATHAM-MADISON.—The disposal plant at Chatham, serving the Borough of Chatham and Madison, was put into operation early in November, 1911, the plant consisting of screens, high and low level settling tanks of the Imhoff type, primary and secondary contact beds and sand filter. There are two screen chambers, each fitted with two screens in tandem. The first consists of steel bars spaced 1¼ inches on centers, and the second is of steel bars spaced ⅝ inches on centers.

The high level settling tank is divided longitudinally into three units, 14 feet by 50 feet inside, each of which is divided transversely into four compartments. Each compartment has a hopper shaped bottom, from the lowest

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point of which is a connection to an 8 inch vitrified sludge outlet pipe leading to the sludge bed. Distributing and collecting troughs extend the entire width of the three units, and arrangement is made by which the sewage may be made to enter at either end of the tank. The inner edge of each trough is a weir, which is protected by a scum board. The sludge chambers are calculated to store six months accummulation of sludge. The total capacity of the upper compartment of the tank is 67,500 gallons. The low level tank is similar to the high level tank, but consists of a single unit, 14 feet by 50 feet and 10 feet deep to the flow line. This tank has a capacity of 9,000 gallons.

The effluent from the high level tanks goes to the primary contact beds, that from the low level tank is too low to enter these beds and passes directly to the secondary contact beds. Both primary and secondary contact beds are 75 feet square, filled with 4 feet of crushed stone. They are arranged in a square with a regulating house in the center. This consists of the Ansonia automatic tipping frame.

The underdrainage system consists of a main collecting drain 15 inches wide, running diagonally across the bed, with laterals of 6 inch split tile laid on 8 inch centers at right angles to the main drain.

The secondary contact beds discharge into a secondary tank, also of the Imhoff type. This tank has a capacity of 18,000 gallons.

The sand filters which are also automatically dosed in rotation, are four in number and have a total area of about one acre, and an average depth of 26 inches of sand. The sewage is applied to them through a 12 inch feed line, from which risers deliver it to the surface of the sand. These risers, of which there are three in each bed, are encased in concrete and surrounded at the surface by a concrete table, five feet in diameter, to prevent scouring the sand. The underdrains are 8 inch vitrified pipe laid below sub-grade.

The sludge bed is 100 feet by 50 feet and consists of 12 inches of sand on 8 inches of gravel, and underdrained by 3 inch vitrified pipe laid on 6 feet 6 inch centers, leading to a 10 inch main collector at one side of the bed.

Inspections were made on December 20, 1911, February 5, June 20, 28, 29, July 10, 29, August 20, September 14, 28, and October 21, 1912.

When inspected on June 20th it was found that a device for throttling the discharge from the contact beds had been installed. The effect of this was to produce a practically continuous flow on a very small area of the sand beds, which under these condition turned out a very unsatisfactory effluent. Later these throttliing devices were removed and the distribution on the sand beds was somewhat improved by the more rapid discharge of the contact beds.

As a result of these unsatisfactory conditions the authorities of Chatham and Madison were requested, by vote of the Board at a meeting held July 9, 1912, to put a competent man in charge of the plant and to maintain the plant in a condition satisfactory to this Board.

In August leaks developed in the main feeders for the sand beds and they were all dug up and relaid. The effluent is not satisfactory but the trouble apparently is due to the fact that at present there is a very low flow and that the storage period is excessive. Steps have been taken to remedy conditions by a more frequent flushing of the sewers of Madison and by various small changes at the disposal plant.

CLINTON.—Lehigh Valley Creamery. See State Board of Health Report for 1911, page 319.

COLLINGSWOOD.—The disposal plant at Collingswood, consisting of pumping station, septic tanks, and primary contact beds, has been described in the State Board of Health Report for 1911, page 319.

Inspections were made on December 29, 1911, January 19, March 7 and 14, April 19, May 10, July 3, 18 and 22, and September 9, 1912.

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CHATHAM-MADISON: Sewage Disposal Plant.



MORRISTOWN: Sewage Disposal Plant.

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Although the original plans, as approved by the State Board of Health, called for six contact beds, only four of these were originally built. As a result, these have been overworked and the Company has been required this year to build the other beds. These were completed the latter part of July.

A new 5 inch centrifugal pump has also been installed at the plant to increase the pumping capacity.

The septic tanks were cleaned during the weeks of April 13th and August 25th, the sludge being pumped to an area enclosed by an embankment near the creek.

During the extreme cold weather of last winter a sewer across the marsh at Harrison Avenue froze and broke, splitting many lengths of pipe. This pipe was replaced in the spring, the old pipe being used. The Company was ordered to re-build this line with new pipe, and plans have been submitted to the Board, at a meeting held Octetober 29, 1912, and approved by them for the re-constructing of this pipe line.

Plans for extensions to the sewers of Colligswood were approved by the Board at meetings held on July 30, 1912, and September 10, 1912.

COLT'S NECK.—Colt's Neck Creamery. The disposal plant serving the Colt's Neck Creamery at Colt's Neck has been described in the State Board of Health Report for 1911, page 320.

An inspection was made on December 2, 1911, and the plant was reported in a satisfactory condition.

CRANFORD.—The Board at a meeting held on November 14, 1911, granted an extension of time until December 26, 1911, to Cranford Township, in which to submit plans for taking care of the sewage of Cranford and other places in the vicinity. At a meeting held on December 27, 1911, an extension of time until October 10, 1912, was granted to Cranford in which to install a sewage disposal plant. Plans and reports relative to a joint sewage disposal system for the Rahway Valley, including Rahway and Cranford, were approved by the Board at a meeting held on January 2, 1912. On the 7th of May, 1912, the Board notified the authorities of Cranford to have the overflow pipes removed from their sewers prior to October 10, 1912. At a meeting of the Board held October 1, 1912, a request from the Borough Council of Garwood to connect sewers with the Cranford sewer outlet was refused.

CRESSKILL.—The septic tank serving about 15 houses at Cresskill is described in the State Board of Health Report for 1911, page 320.

Inspections were made on February 27, June 27, and August 6, 1912. On June 27th it was reported that an overflow pipe from the old cesspool was discharging directly into a ditch leading to Tienekill Creek. The Cresskill Slope Sewerage Company was then ordered to remove the overflow pipes, and an inspection on August 6th showed them to be plugged with cement. The tanks were being cleaned at the time of the August inspection.

DEAL BEACH.—The septic tank serving the Borough of Deal Beach has been described in the State Board of Health Report for 1909, page 232.

Inspections were made on November 1, 1911, and on May 28, 1912, and the tank reported in a satisfactory condition. At a meeting of the Board held October 15, 1912, plans for an extension to the sewer system of the Borough of Deal were approved.

DEAL BEACH.—Deal Golf Club. The disposal plant serving the Deal Golf Club at Deal Beach is described in the State Board of Health Report for 1911, page 320.

An inspection was made on June 11, 1912. The tank was reported in good condition, but the sand beds were very much in need of regrading.

DELFORD.—The septic tank at New Milford, which serves a part of the Borough of Delford, has been described in the State Board of Health Report for 1909, page 232.

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An inspection was made on July 8, 1912. At this time it was found that the sludge gate had been opened, thus draining the tank and allowing the raw sewage to run directly to the stream. This condition was reported to the Mayor of Delford, who immediately had the gate closed and ordered locks put on the doors so no one could again get into the tank without his knowledge.

DUNELLEN.—A hearing relative to plans for a joint sewage disposal plant for Plainfield, North Plainfield and Dunellen was given by the Board to interested persons, on Tuesday, October 15, 1912, in the State House at Trenton. Action on this matter is still pending.

EAST BOUND BROOK.—At a meeting of the Board held June 4, 1912. plans for a sewage disposal system for East Bound Brook were approved subject to the elimination of a by-pass pipe. At a meeting held June 25, 1912, an extension of time was granted until July 1 1913, for the installation of a sewage disposal plant for East Bound Brook, provided a statement is filed with the Board, whereby it is agreed that the plant will be constructed in the spring of 1913.

EAST ORANGE.—A hearing was granted by the Board, to those interested in the installation of a joint sewage disposal plant for the municipalities of Orange, East Orange and Montclair, to be located in Belleville Township. This hearing was held in the State House, Trenton, on July 2, 1912. Plans for the proposed joint disposal plant for these municipalities were approved, subject to minor changes by the Board at a meeting held on August 27, 1912.

EAST RUTHERFORD.—The septic tanks at East Rutherford, which serve the Borough of East Rutherford and a part of the Borough of Carlstadt, are described in the State Board of Health Report for 1910, page 364.

An inspection was made on August 3, 1912, and the tanks were reported in good condition. Neither of these tanks has required cleaning during a period of service of more than three years, and still contain very little solid material.

ENGLEWOOD.—The sewage disposal plant serving the Borough of Englewood is situated on Cedar Lane, Nordhoff. It consists of a sedimentation tank of the Imhoff type. The tank is 80 feet by 42 feet and is divided longitudinally into three sections. An inlet trough fitted with gates allows the flow of sewage to be turned to any one or all of the sections at a time. The bottom of each section slopes to two sludge slumps, which connect with a 10 inch sludge drain. A collecting trough extends across the outlet end of the tank, the effluent being discharged through an 18 inch outfall pipe to Overpeck Creek.

Inspections were made on December 14, 1911, January 26, February 27, and August 6, 1912. At the first inspection the plant was reported not completed. It was, however, completed before the January inspection, but sewage had not been turned into it then, nor when inspected in February. In August the plant was found in operation, and although the effluent was quite turbid it was free from floating solids.

ESSEX FELLS.—The sewage disposal plant at Essex Fells, comprising septic tank, contact beds, and sand filters has been described in the State Board of Health reports for 1909 and 1910, pages 233 and 364 respectively.

Inspections were made on December 8, 1911, April 22, and September 26, 1912. and with the exception of one of the old sand beds, the plant was reported to be in a satisfactory condition, turning out a clear and sparkling effluent. At the last inspection the plant was not in its usual condition on account of excessive rains which made it necessary to by-pass the sewage around the contact beds and on the old gravel beds.

FAIRVIEW.—Plans for a sewer system and a sewage disposal plant for the Borough of Fairview were approved by the Board at a meeting held on June 11, 1912.

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FORT LEE.—Plans for various extensions to the sewers of Fort Lee were approved by the Board at meetings held June 4, 11 and 25, 1912.

FLEMINGTON.—The sewage disposal plant at Flemington, consisting of screens, a dosing tank and land filters, is described in the State Board of Health Report for 1909, page 233.

Inspections were made on December 13, 1911, and June 21, 1912, and the plant reported in excellent condition, turning out a clear and non-putrescible effluent.

FREEHOLD.—A description of the sewage disposal plant at Freehold is given in the State Board of Health Report for 1909, page 234.

Inspections were made December 2, 1911, February 1, March 22, and May 22, 1912. In every case a favorable report was made on the appearance of the plant. The effluent has, however, shown an unsatisfactory degree of purification.

GARWOOD.—The Board at a meeting held January 30, 1912, approved plans for extensions to the sewer system of the Borough of Garwood. At a meeting held October 1, 1912, the request from the Borough Council of Garwood to connect the Garwood sewers with the Cranford sewer outlet, was refused by the Board.

GIBBSBORO.—John Lucas Company. Plans for a sewage disposal system for the treatment of sewage from the plant of the John Lucas Company at Gibbsboro, were approved by the Board at a meeting held on June 4, 1912.

GLEN GARDNER.—New Jersey Sanatorium for Tuberculous Diseases. The sewage disposal plant at the New Jersey Sanatorium for Tuberculous Diseases at Glen Gardner, which consists of a septic tank, sprinkling filters, settling basin and cinder filters is described in the State Board of Health Report for 1909, page 234.

An inspection was made on January 8, 1912, and the plant reported to be in very bad condition. The septic tank was almost completely filled with solids, most of the sprinkling filter nozzles were clogged, the distributors on the cinder beds all rotted and going to pieces, and the cinder beds were so dirty that no sewage passed through them but ran over the surface and down the hillside.

At inspections on August 16 and September 18, 1912, the plant was found in the same extremely unsatisfactory condition, apparently nothing having been done to improve it, with the exception of cleaning out the septic tank early in September.

It is very evident that this plant is continually suffering from lack of attention, as the above mentioned conditions give a fair idea of the ordinary state of affairs at the plant.

GRENLOCH.—Bateman Manufacturing Company. Plans for a sewage disposal plant for the Bateman Manufacturing Company at Grenloch were approved by the Board at a meeting held on August 20, 1912.

HACKENSACK.—Plans for various sewer extensions for Hackensack were approved by the Board on May 21, 1912, July 9, 1912, and September 10, 1912, the last approval being subject to the notice to said City to cease polluting the Hackensack River prior to January 1, 1914. A hearing has been granted to those interested in plans submitted to the Board for a sewer system and sewage disposal plant for the City of Hackensack. This hearing is to be held on November 12, 1912.

HADDONFIELD.—A description of the sewage disposal plant serving the Borough of Haddonfield will be found in the State Board of Health Report for 1909 and 1911, pages 235 and 321, respectively.

Inspections were made on November 20, December 8, 1911, February 6, April 18, June 5, July 22, August 5, and September 9, 1912, and more or less unsatisfactory conditions were reported each time. Considerable trouble has

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been experienced with the sprinkling filter nozzles blowing out. An improved type of the same kind of nozzle was put in, and for a while it was thought that this difficulty was overcome. Some of the later inspections, however, showed that it had occurred again.

The sprinkling filter effluent has been run directly to the ditch for the greater part of the time, the sand beds being used only to receive an overflow from the septic tank. The sand filters, in spite of the small amount of use, have been very dirty at nearly every inspection.

The secondary settling tank is very dirty, but it is expected to be cleaned very soon.

During the greater part of the year the sprinkling filter effluent has been putrescrible, although samples taken on April 18 and August 5, 1912, were non-putrescrible.

HADDON HEIGHTS.—A description of the sewage disposal plant at Haddon Heights, consisting of septic tanks, coke strainers, dosing tank and sand filters, will be found in the State Board of Health Report for 1911, page 322.

Inspections were made on December 29, 1911, January 30 and 31, February 7 and 16, March 14, April 19, June 5, August 5, and September 9, 1912.

The December inspection revealed the fact that the sand filters were turning out a putrescrible effluent. A more complete investigation showed that sewage was detained too long in the septic tank, and was practically devoid of oxygen when leaving the tank. To relieve this condition a sub-drain to the sewer was partially plugged so as to turn a portion of the flow into the sewer. This not only reduced the time of storage but also increased the oxygen content in the septic effluent. Since that time the sand filter effluent has been clear, bright and sparkling. The attendant makes putrescribility tests at frequent intervals and in that way keeps a very close watch on the effective operation of the plant.

HASBROUCK HEIGHTS.—At a meeting of the Board, held January 9, 1912, amended plans for a sewage disposal plant for the Borough of Hasbrouck Heights were approved by the Board.

HIGHLAND PARK.—An extension of time until July 1, 1912, was granted by the Board on January 2, 1912, to the authorities of the Borough of Highland Park, in which to install a sewage disposal plant. At a meeting of the Board, held on July 9, 1912, a further extension of time was granted until January 1, 1913.

HIGHTSTOWN.—At a meeting of the Board, held July 9, 1912, an extension of time until January 1, 1913, was granted to the Borough of Hightstown, in which to install a sewage disposal plant. Construction work is now under way.

HILLIARD'S ISLAND.—A. H. Riggs. The sewage disposal plant at the residence of Mr. A. H. Riggs on Hilliard's Island, is described in the State Board of Health Report for 1911, page 323.

The plant was inspected on November 2, 1911, and June 18, 1912, and was reported in a satisfactory condition. The septic tank was cleaned out this spring after three years of service. Less than a bucketful of solids was removed from the tank.

ISLAND HEIGHTS.—The sewage disposal plant at Island Heights, composed of a screen chamber and sand filter, has been described in the State Board of Health Report for 1910, page 364.

At an inspection on March 6, 1912, the plant was reported to be in bad condition. That part of the beds which had received the flow was so dirty that the sewage was ponded on them; the beds were not alternated often enough, and the effluent showed unsatisfactory purification. A lot of rubbish was thrown onto one of the beds from a nearby dump. These conditions were reported to the Mayor and the Local Board of Health of Island Heights.

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accompanied by suggestions and recommendations for improving the plant. At a later inspection on June 4, 1912, it was found that the sand beds had all been thoroughly cleaned and were in good condition. It was evident, however, that they were not changed as frequently as they should be. The effluent at this time was clear and non-putrescible. Further inspection on September 5, 1912, showed that the beds were dirty and that they required a great deal of attention in order to keep them in proper working order. The installation of a sedimentation tank is now being considered by the officials of the Borough.

INTERLAKEN.—A description of the septic tank and pumping station at Interlaken will be found in the State Board of Health Report for 1909, page 235.

The plant was inspected on May 29, 1912, and everything found to be in good condition. In the past at times of heavy rain the pumps were unable to handle the excessive flow and the motors would be flooded out by the rising sewage. During the past year the motors have been raised three feet, so they will always be above the highest possible level to which the sewage can rise. No trouble has been experienced since this was done.

JAMESBURG.—New Jersey State Home for Boys. The sewage disposal plant serving the State Home for Boys at Jamesburg, comprising flush tanks and land filters has been described in the State Board of Health Report for 1909, page 236.

Inspections were made on December 9, 1911, and on March 22, 1912, and it was reported that the plant was in very bad condition. The beds were flooded to such an extent that the enclosing banks had broken through and raw sewage was flowing from the surface of the beds across the adjoining field to the brook. Samples taken from this brook for a quarter of a mile below the plant were all putrescible. The attention of the Superintendent of the Home was called to these conditions and improvements were promised.

At an inspection on May 22, 1912, it was reported that these improvements were under way. The distributing system, parts of which had been rendered useless by the frost of the previous winter, had been repaired; new underdrains had been laid under the lower series of beds; a new collecting ditch had been dug, and new underdrains were to be laid in the higher series of beds.

This plant was again visited on August 22nd and it was reported that sewage from the surface of the beds was escaping to the effluent ditch through a break in the underdrains.

All samples of the effluent from these beds taken during the past year have been putrescible.

KENILWORTH.—American Circular Loom Company. During the past year a small plant for the treatment of the wastes of the American Circular Loom Company at Kenilworth, has been constructed. The wastes are largely composed of iron cleaning and pickling liquid. In a suitable tank quick lime is slacked and mixed by means of compressed air agitation. This lime is added to the wastes at the outlet of the waste pipe as it runs into a small artificial pond. From this pond, or lagoon, the liquid seeps through broken stone into the Rahway River. About three pounds of lime are added to 100 gallons of acid effluent. The lime is supposed to precipitate all the iron and to neutralize the acid.

KEYPORT.—The disposal plant for the treatment of the sewage of Keyport consists of tanks for sedimentation and disinfection by hypochlorite of lime.

The sedimentation tank is divided longitudinally into two sections, each 12 feet by 90 feet, with a depth to the flow line of 7 feet. A distributing trough extends across the inlet end of the tank. One or both sections may be used at a time. An under baffle is placed 3 feet from the inlet weir in each section

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to prevent a direct current through the tank, and a similar baffle is placed at the outlet end to prevent large floating particles from leaving the tank. There is a slight slope of the bottom to a point near the outlet end, from which point a 10 inch sludge pipe leads to the suction well of a triplex plunger pump, having a capacity of 80 gallons per minute. A gasoline engine is used as motive power. The discharge piping from this pump is so arranged that the sludge may be delivered into the trough of the disinfection tank or to a cart outside the pump house. The disinfectant apparatus consists of two re-inforced concrete mixing tanks, 3 feet by 4 feet and about 3 feet deep. These discharge the solution into the collecting trough at the outlet end of the sedimentation tank. This trough leads to the mixing trough at the inlet end of the disinfection tanks. The amount of disinfectant added at any time is automatically regulated by the flow of sewage at that time. The mixing trough consists of a series of weirs and baffles for thoroughly mixing the disinfectant with the sewage. The disinfection tank is also divided longitudinally into two sections, each 6 feet by 45 feet by 7 feet. These floors also slope to a sludge pipe leading to the above mentioned pump well. Distributing and collecting troughs are placed at inlet and outlet ends. The tanks are also baffled to make the whole tank available.

The pump and disinfectant apparatus are housed in a neat building of pressed brick.

The effluent from the plant is discharged through a 12 inch cast iron outfall pipe into Raritan Bay.

The plant was visited on December 15, 1911, February 1 and 20, and July 9, 1912 and, it was reported completed but not in operation. There was, however, quite a flow of water through the plant, due to infiltration into the sewers.

A letter was received from the Borough Clerk on August 21, 1912, stating that the plant had been put into operation.

LAKEHURST.—The old sewage disposal plant serving the Pine Tree Inn and several cottages at Lakehurst has been described in the State Board of Health Report for 1909, page 237.

In 1911 two new sand filters were started, one of which was only half completed.

An inspection was made on January 2, 1912, and it was reported that the use of the old sand beds near the railroad had been discontinued, and the sewage was now conducted to the new beds. As only one of these beds was completed it had been receiving the entire flow of sewage since about October 1, 1911. As a result, it was very badly clogged and flooded, and the effluent was very unsatisfactory.

The Company was then instructed to clean this bed and to finish immediately the other bed, or in some other way provide for intermittent flow upon the existing bed. Word was later received that the flow had been turned on to the other bed. A re-inspection on May 21, 1912, revealed the fact that the sewage had been turned into the unfinished end of the second bed, whence it had run through the underdrains of the finished portion directly to the ditch, at least while the completed bed was being cleaned.

During the summer of 1911 a concrete settling basin was constructed near the new beds, and it would be a material aid if a siphon chamber was built in connection with this to provide intermittent dosing of the beds.

LAKEWOOD.—The sewage disposal plant at Lakewood, consisting of screens and sand filters, is described in the State Board of Health Report for 1911, page 324.

Inspections were made on January 4, March 4 and 20, May 2, June 6, and August 12, 1912. In January the plant was reported in good condition, but the effluent showed very unsatisfactory purification. In answer to a complaint

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from the Local Board of Health of Lakewood, a speical inspection was made on March 4, 1912. At this time the sand filters were in extremely bad condition and were probably the cause of the nuisance which brought about the complaint. A number of recommendations were then sent to the Company to relieve conditions. The inspection on May 2nd showed that some of these suggested improvements in the management of the plant had been carried out with a corresponding improvement in the appearance of the plant. The effluent, however, still showed unsatisfactory purification. Both the June and August inspections gave evidence of the fact that the plant has been receiving much better care than previously and was in better condition than for a year past.

This plant has always been the cause of more or less complaint by the residents of that section of the city, and as a result, the owners have decided to discard it and build another about a mile further down the stream. Plans for this new plant were approved by the Board at a meeting held on August 20, 1912, and construction of the new plant has begun. A description of this will be given when completed.

LAWRENCEVILLE.—Lawrenceville Preparatory School. A description of the sewage disposal plant serving the Lawrenceville Preparatory School and Lawrenceville is given in the State Board of Health Report for 1909, page 237.

The plant was visited on February 2, 1912, and the tank reported in a satisfactory condition. It is evident, however, that very little care is given the irrigation field, the sewage being allowed to take its own course over the field, and were it not for the large aera of available land trouble would no doubt be experienced. So far the field has handled the sewage in a satisfactory manner.

LOCH ARBOUR.—The septic tank at Loch Arbour was described in the State Board of Health Report for 1911, page 325. The tank was cleaned in December, 1911, and when inspected on May 29, 1912, was reported in a satisfactory condition.

LONG BRANCH.—The sewage disposal plant at Long Branch, consisting of screens, and tidal tank, has been described in the State Board of Health Report for 1911, page 325.

On November 28 and Decmber 4, 1911, investigations were made for the purpose of determining whether or not fecal matter from the outfall pipe returned to the beach. On account of adverse conditions no definite conclusions could be drawn from these investigations. It was, however, learned that quite large pieces of fecal matter were present in the sewage entering the outfall pipe, indicating that the screens were either in poor condition, or that they were not always used. It was also found that two auxillary outfall pipes are maintained, which discharge only a short distance from the shore. These are supposed to be used only in times of severe storm, or of exceedingly high tide. They were in use, however, at the time of this investigation.

In response to a complaint of a pollution of a small brook on Broadway another investigation was made on April 11 and 15, 1912. At this time a very serious pollution of the stream was reported, a by-pass being laid directly to the brook.

On April 11, 1912, the screen house was thoroughly inspected and it was found that the screens were being by-passed, and no disinfectant was being added to the sewage. A manhole in the street in front of the screen house was almost completely filled with solids, and unscreened sewage was going through it to the tidal tank.

As a result of this investigation the Long Branch Sewerage Company was notified, by vote of the Board on April 23, 1912, to remove the by-pass on Broadway and to put their plant in proper working condition.

Various plans for extensions to the sewer system of Long Branch were approved by the Board at meetings held February 6th and October 8, 1912.

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LONGPORT.—At a meeting of the Board, held January 30, 1912, an extension of time until June 1, 1913, was granted to the Borough of Longport in which to install a sewage disposal plant, provided plans for said plant were immediately submitted to the Board for approval. At a meeting of the Board, held May 14, 1912, plans for the proposed sewage disposal system for Longport were approved.

MADISON.—See Chatham-Madison. Plans for extensions to the sewer system of Madison were approved by the Board at a meeting held on January 2, 1912. As a result of various investigations of conditions at the joint Chatham-Madison disposal plant, the Mayor of Chatham was notified by vote of the Board on July 9 1912, that the pumps in the low level pumping station for the Madison sewage, must be run so as to give a contiunous flow of sewage into the tanks at the disposal plant. An extended investigation on October 22, 1912, showed that the pumps were not being properly operated and steps have been taken to have them so adjusted that the most efficient results will be obtained at the disposal plant.

MADISON.—Residence of the late Dr. Leslie D. Ward. The sewage disposal plant for treating the sewage from the residence and stable of the late Dr. Leslie D. Ward, is described in the State Board of Health Report for 1911, page 325. It was visited on July 10, 1912, and was reported to have been out of use since the death of Dr. Ward, as the house and stables are unoccupied.

MAHWAH.—American Brake Shoe and Foundry Company. A description of the flush tank and sand filters for treating the sewage of the American Brake Shoe and Foundry Company's factory at Mahwah, will be found in the State Board of Health Report for 1910, page 368. It was inspected on December 28, 1911, and September 27, 1912, and reported in a satisfactory condition.

MANASQUAN.—A description of the septic tank at Manasquan is given in the State Board of Health Report for 1910, page 367. The tank was visited on November 1, 1911, and was reported in a satisfactory condition.

MARGATE CITY.—The two plants for treating the sewage of Margate City with hypochlorite of lime, were visited on July 22, 1912, and were found in a very unsatisfactory condition. Although these plants have been constructed for more than a year no water connection has been made at the Nassau Avenue plant, and so no disinfection can be attempted there.

At the Adams Avenue plant the water connection is in, and some hypochlorite of lime has been used. It was apparent on the day of inspection, however, that none had been used for a considerable time. The feed tank was empty and the mixing tank had never been used; such hypochlorite as had been used being mixed in the feed tank. There was very little hypochlorite on hand, and this had been placed directly under a broken skylight, where it had been rained on and spoiled.

The tide gate on the outfall pipe does not operated properly and the tide backs into the tank at high tide. This backs the sewage up in the sewers and causes nuisance from deposits in them.

As a result of these findings the authorities of Margate City were notified to put their plant in proper operating condition and to instruct the attendant to give careful attention to its operation.

Plans for another sewage disposal system for a portion of Margate City were approved by the Board at a meeting held August 27, 1912.

MEDFORD.—The septic tanks and sand filters for treating the sewage for a portion of Medford have been described in the State Board of Health for 1911, page 326.

The plant was visited on December 15, 1911, and although the tanks and filters were clean the effluent showed unsatisfactory purification. This is probably due to the very poor distribution on the beds and too infrequent

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alternations of the beds. Both these defects could be overcome by installing a siphon and thus dosing the beds intermittently.

Plans for a new sewage system and sewage disposal plant for the Town of Medford have been submitted to the Board and at a meeting held October 29, 1912, were laid over for further consideration.

MERCHANTVILLE.—The sewage disposal plant at Merchantville, comprising septic tanks, dosing tank, coke strainers and sand filters, is described in the State Board of Health Report for 1909, page 237.

Inspections were made on February 1, March 7, April 12, and May 16, 1912, and in every case the flow of sewage was found to be too great for the siphons of the dosing tank to handle. On this account there was a continuous flow of sewage to the sand beds instead of intermittent dosing.

In February and March the sand beds were reported badly clogged and the sewage was running over the back wall to the creek. The attention of the Mayor of Merchantville was called to this matter and improvements were promised. The April inspection showed a marked improvement in the condition of the plant.

Further inspections were made on September 5, 23, and October 8, 1912. At the last inspection it was found that the new ten-inch siphons had been installed, such a course having been approved by the Board at a meeting held July 9, 1912, and were working very well. The septic tanks were found to be filled with solids and owing to the fact that the underdrains had become clogged the sand beds did not drain properly. A communication setting forth these facts was sent to the local authorities and steps have been taken to clean out the septic tanks and to re-lay the underdrains.

MILLTOWN.—A hearing in regard to plans for a proposed sewage disposal plant for the Borough of Milltown was held by the Board on August 27, 1912. At a meeting held September 17, 1912, approval of plans for a sewage disposal plant for the Borough was laid over until a future meeting of the Board. As the effluent from the proposed plant is to enter Lawrence Brook, which is used in turn as a water supply for the City of New Brunswick, the Board, at a meeting held October 29, 1912, called a conference with the Water Commissioners of New Brunswick for November 19, 1912, to further consider the plans submitted to the Board for the sewage disposal plant at Milltown.

MILLVILLE.—The sewage disposal plant at Millville, consisting of septic tanks, aëration, primary contact and disinfection by copper sulphate, is described in the State Board of Health Report for 1911, page 327.

An inspection was made on December 14, 1911, and the plant reported to be suffering from a lack of attention and was consequently in a very bad condition. As a result of these conditions, a complete investigation was made on December 19, 20, 22 and 23, 1912. Weir readings taken on December 19 and 20 indicated a daily flow of 1,120,000 gallons, with very little variation in the amount of flow throughout the 24 hours. There was, however, a marked difference in the appearance of the material coming to the plant. In the early morning the liquid bore almost no resemblance to sewage, being very clear and free from fecal matter.

On the basis of the above mentioned flow of sewage, the copper sulphate being added was determined to be about 2.0 parts per million. This did not give a satisfactory removal of bacteria. As a result of this investigation the city authorities were instructed to investigate the sources of infiltration into their sewers, to put their plant into proper operating condition, and to put a man in charge of the plant to keep it in condition. These recommendations were taken up in the Council and the Committee on Sewers was instructed to fully comply with them.

At an inspection on January 12, 1912, the following conditions were found: There was a continuous flow through two of the beds; the flow of sewage

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was even greater than during the investigations of December 19-23, at this time overflowing the septic effluent channel and flooding the surrounding grounds; the copper sulphate cans were empty, and the supply nearly exhausted.

On January 20, 1912, weir readings indicated the rate of flow to be 1,400,000 gallons per 24 hours, and the sewage was again overflowing the septic effluent channel. On this visit it was learned that a man had been engaged to take care of the plant, and the City Engineer had been instructed to investigate the infiltration.

The plant was again inspected on February 8, 1912. The attendant appointed to take charge of the plant had assumed his duties and a decided improvement was already noticeable in the appearance of the plant and in the quality of the effluent.

Other inspections were made on April 2nd and May 17, 1912, and very unsatisfactory conditions reported. The authorities were again notified and remedies suggested. Some of these were carried out and an improvement was noted at an inspection on June 25th, although the work of cleaning the tanks was not completed. Still further improvement was noted on July 1, 1912. At this time it was suggested that baffles and scum boards be placed in the septic tanks, and that they be run in parallel instead of in series. This was done and on inspection on July 31, 1912, there appeared to be much less suspended matter in the septic effluent than at any previous inspection. Less work was, therefore, necessary on the contact beds.

Further inspections of a very extensive nature were made on September 11, 25, October 1, 4 and 28, 1912. At these inspections very unsatisfactory conditions were found to prevail. The effluent retained in the storage basin at times of high tide backed up into the discharge pipes and prevented the proper action of the dosing device, and the proper alteration of the beds. Bacteriological tests showed that the copper sulphate as applied failed to give proper disinfection. As a result of these conditions the City of Millville was notified to retain a competent engineer to make needed improvements at the disposal plant. Various actions have been taken by the Board, with a view to remedying conditions at the disposal plant, and by vote of the Board on October 29, 1912, the authorities of the City of Millville were notified that unless the sewage disposal plant of the city is put in proper working order without delay the Board will be obliged to place the matter in the hands of the Attorney-General for action.

MONTAGUE.—Rock Spring Creamery Company. The tank for disposing of the wastes of the Rock Spring Creamery at Montague by precipitation with lime, is described in the State Board of Health Report for 1911, page 328.

MONTCLAIR.—See East Orange.

MOORESTOWN.—A description of the sewage disposal plant at Moorestown, consisting of septic tank and content filters, is given in the State Board of Health Report for 1909, page 238.

Inspections were made on December 11, 1911, February 6, March 7, April 5, May 31, and September 9, 1912, and in each case it was reported that the siphons in the dosing tank were not operating properly. This is because they are too small to handle the excessive flow and consequently, do not break. The whole plant is very much overloaded and the authorities of Moorestown have been repeatedly urged to enlarge their plant, and on April 15, 1912, at their request, a representative of this Division met the Local Board of Health at the disposal plant to talk over the matter of extensions. As a result of this conference the authorities were advised to double the septic tank capacity, install larger siphons for dosing the beds, and to employ an engineer to carry out this work.

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In spite of the heavy overload at this plant, the effluent is usually very clear, and with the exception of a few hours of the day, is usually non-putrescible.

The slag beds appear in very good condition on the surface, and for some little distance down, but it is evident that they are getting clogged at the bottom. This clogging is undoubtedly more rapid under the slow discharge here used than it would be otherwise. The cinder bed is much more clogged than the slag beds, due in a great measure to the disintegration of the cinders.

Steps have been taken in regard to enlarging the disposal plant, in accord with votes of the Board on February 20, 1912, and April 9, 1912.

MORRIS PLAINS.—The New Jersey State Hospital. Descriptions of the two sewage disposal plants of The New Jersey State Hospital for the Insane at Morris Plains, consisting of a sand filtration system and a land irrigation system, will be found in the State Board of Health Report for 1909, page 239.

Inspections were made on January 10, April 1, July 5, and September 13, 1912, and both systems were reported in *excellent* condition. Even during the heavy rains of the spring no sewage escaped from the irrigation field, and the effluent from the sand filters is always clear and bright as spring water, and all samples have been non-putrescible.

MORRISTOWN.—The sewage disposal plant at Morristown, comprising septic tanks, primary contact beds and sand filters, has been described in the State Board of Health Report for 1910, page 366.

An inspection on January 10, 1912, revealed the fact that while the plant was to all appearances in excellent condition, and was turning out a clear and sparkling effluent, this effluent was putrescible. Consequently an investigation was made on February 13-15, 1912, to determine the cause of this. At this time it was found that the raw sewage arriving at the plant, and the septic effluent were almost devoid of oxygen. The tank then in use was almost completely filled with solids, and the flow was consequently turned to another tank, which had never been used. In order to reduce the time required for the passage through the plant, which at that time was from 18 to 20 hours, the automatic regulating device was changed so as to reduce the available depth of the contact beds. During the winter considerable ice formed on the sand beds, one of them being covered to a depth of nearly a foot. As the beds were ridged during the winter, there were channels under the ice, through which the sewage could get to the sand, but the ice prevented a satisfactory aeration of the sand when the sewage drained away. When the ice melted sufficient to get to work on the beds it was found that the sand at a depth of about one inch below the surface was extremely black and of an offensive odor. This was no doubt caused by a lack of aeration, for when this black sand was removed and placed in contact with the air it soon lost its black color and the odor, as was shown by an investigation on April 1, 1912. After this black sand was removed the beds were ploughed, harrowed and levelled off for the summer, and from April 18th to inspection on July 5, 1912, only one of the daily samples was putrescible.

Further inspections on September 13th and October 21, 1912, showed that the plant was in satisfactory condition and that the effluent was uniformly non-putrescible.

MULLICA HILL.—There is at Mullica Hill a small sewage disposal plant serving a few houses and the railroad station. It consists of two cesspools, each about 6 feet in diameter. The first is tight and retains the solids, the second has a sand bottom, from which the liquids seep away through the ground.

The plant was visited on February 15th and April 19, 1912, and although the liquid from the second tank was seeping through to the hillside, it was all absorbed again by the ground before reaching the stream.

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NEPTUNE TOWNSHIP.—The Neptune Township sewerage system consists of two 15 inch main sewers and their laterals, which discharge into an ejector well near the railroad crossing on Twelfth Avenue. From here the sewage has been raised by the ejectors into the sewers of Ocean Grove.

On July 9, 1912, plans were submitted and approved for a new disposal plant to consist of septic tanks with outfall to the ocean. A full description of this plant will be given when completed.

NESHANIC.—Lehigh Valley Railroad Creamery. The disposal plant for treating the creamery wastes of the Lehigh Valley Railroad Creamery at Neshanic with lime, is described in the State Board of Health Report for 1911, page 329.

It was visited on June 21, 1912, and was reported in very bad condition. The precipitated solids had never been cleaned out of the tanks, and as a consequence the tanks were very filthy and were the source of very offensive odors. Each time a tank was drawn off more or less of the solid matter went with the liquid and lodged in the gutter at the side of the road, where in the hot sun it created a nuisance of the worst kind. These tanks and the ditch are breeding places of innumerable flies, one of the tanks being alive with maggots at the time of inspection. Although plenty of lime was used it was allowed to slake in the air before using and no benefit was derived from its use.

The foreman of the creamery was instructed to prepare and use the lime, and to keep the tank clean. If these instructions are followed satisfactory results should be obtained.

NEW BRUNSWICK.—Plans for various extensions to the sewers of New Brunswick were approved by the Board at a meeting held September 17, 1912, subject to the notice given to cease polluting the Raritan River prior to July 1, 1912.

NEW LISBON.—Burlington County Hospital for the Insane. On September 28, 1908, the State Board of Health passed a resolution that the Board of Freeholders of Burlington County be given notice to make such changes in their old disposal plant as were necessary to prevent the pollution of Rancocas Creek by sewage from the Burlington County Institutions at New Lisbon. Nothing has been done along that line, however, until the past year. In November, 1911, some changes were made that were not in accordance with the plans approved by this Board.

Inspections were made on December 1, 1911, January 4, February 29, and May 10, 1912.

On December 1, 1911, the raw sewage was found running directly to the ditch thence to the creek, while the slag in the contact beds was being washed.

These beds were again found in operation on January 4, 1912, and were then giving a clear and odorless effluent. This effluent was found to have fallen off in quality when inspected on February 29, 1912, and the effluent ditch was in very bad condition. The matter of satisfactorily disposing of this sewage was then taken up with the Board of Freeholders of Burlington County, and by vote of the Board on January 30, 1912, they were given until May 1, 1912, in which to complete their plant. An inspection on May 10, 1912, showed the work under way, but not completed, and at a further inspection on September 10, 1912, the plant was found completed but not working properly.

NEW LISBON.—Burlington County Almshouse and Hospital. The sewage disposal plant of the Burlington County Almshouse and Hospital at New Lisbon, consisting of septic tank and tile absorption system, has been described in the State Board of Health Report for 1909, page 240.

It was inspected on December 1, 1911, January 4, February 29, and May 10, 1912, and was reported to be in a satisfactory condition.

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NEW MILFORD.—See Delford.

NEW PROVIDENCE.—Union County Tuberculosis Sanatorium. At a meeting of the Board held on June 11, 1912, plans for a sewage disposal plant for the treatment of sewage from the Union County Tuberculosis Sanatorium, in the Township of New Providence were approved.

NEWTON.—At Newton there are two sewage disposal plants, one at Clinton Street and the other at Sparta Street. Each plant consists of septic tanks and sand filters, and have been described in the State Board of Health Report for 1909, page 240.

These plants were inspected on February 28th and September 19, 1912, and reported to be in good condition. During the past year the underdrainage system at the Clinton Street plant has been re-laid, and the beds re-surfaced. Some trouble has been experienced in draining these beds on account of the stream frequently rising considerably above the underdrains. At the Sparta Street plant a bright, clear and non-putrescible effluent is turned out. The dosing device at this plant, however, does not at all times work properly.

Although the septic tank at this place has been in operation for five years it has never been necessary to clean it out.

NORTH BERGEN TOWNSHIP.—Plans for a sewage disposal system for North Bergen Township, by vote of the Board of Health on October 29, 1912, were returned to the consulting engineer in charge of the work, with a statement that the Board cannot approve plans calling for combined sewers.

NORTH PLAINFIELD.—See Dunellen.

OCEAN CITY.—The sewage disposal plant for treating the sewage of Ocean City with hypochlorite of lime has been described in the State Board of Health Report for 1911, page 329. An inspection was made April 8th, and the plant reported nearly completed, but not as yet put into operation.

The plant was put into operation on May 14, 1912. An inspection was made on July 23, 1912, for the purpose of determining its bacterial efficiency. No test was made on account of the fact that the hypochlorite feed pipe had become clogged, and was taken out to be cleaned that day, so no disinfectant was being added to the sewage.

The plant showed evidence of careful attention and will undoubtedly perform its function in a satisfactory manner.

OCEAN GROVE.—The septic tank at Ocean Grove is described in the State Board of Health Report for 1909, page 241.

It was inspected on November 13, 1911, and it was reported that a cleaning would be necessary before the opening of another season. The tank was cleaned in March, 1912, and when inspected on May 29, 1912, was in a satisfactory condition.

ORADELL.—See Delford.

ORANGE.—See East Orange.

OVERBROOK.—Essex County Hospital for the Insane. The sewage disposal plant of the Essex County Hospital for the Insane at Overbrook, consisting of septic tanks, contact beds, and sand filters, has been described in the State Board of Health Report for 1909, page 242.

The plant was inspected on August 23 and September 26, 1912, and reported in excellent condition. The attendant has been making daily putrescibility tests since last fall, and not a single sample has been putrescible in that time.

PEMBERTON.—A description of the settling basin and land disposal area at Pemberton is given in the State Board of Health Report for 1909, page 243.

Inspections on December 1, 1911, and January 4, 1912, showed the plant to be in a satisfactory condition. Another inspection on February 29, 1912, showed the plant to be all right at that time, but also showed that breaks

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had occurred at some recent date and allowed sewage to escape to the creek. These breaks had been repaired before the inspection. An inspection on September 5, 1912, showd that a dyke had been constructed to prevent the sewage from running into the creek.

PENNS GROVE.—Plans for a sewage disposal system for the Borough of Penns Grove were approved by the Board at a meeting held August 27, 1912.

PHILLIPSBURG.—Plans for various extensions to the sewers of Phillipsburg were approved by the Board at meetings held November 14, 1911, and October 15, 1912, under stipulation to the effect that said approval will not affect the suit now pending by the Board against said city, relative to the matter of disposal of sewage.

PLAINFIELD.—The sewage disposal plant at Plainfield, consisting of septic tanks, primary and secondary contact beds, is described in the State Board of Health Report for 1909, page 243.

Inspections were made on January 5, March 13 and May 1, 1912, and the plant was reported heavily overloaded in every case. The contact beds have become so clogged that the capacity is considerably reduced and the beds do not drain between doses.

Plans for extensions to the disposal plant were submitted to the State Board of Health by the City of Plainfield, but on account of the fact that several towns in that vicinity are now trying to get together to build a joint disposal plant, no action has as yet been taken by the Board in regard to them.

The septic tanks were cleaned this spring, at which time there was considerable odor about the plant.

Daily chemical and bacterial analyses of the sewage and effluent are made by the chemist in charge. Practically all the samples collected by representatives of the Board have proved to be putrescible.

Plans for various extensions to the sewers of the City of Plainfield were approved by the Board at meetings held on November 28, 1911, and December 12, 1911, (See Dunellen.)

PLEASANTVILLE.—New Rodney Hotel. The sewage disposal plant serving the New Rodney Hotel at Pleasantville, consisting of septic tanks, flush tank and primary contact beds, is described in the State Board of Health Report for 1911, page 331. It was inspected on January 8, 1912, and was reported in a very satisfactory condition, turning out a clear and odorless effluent.

POINT PLEASANT.—A description of the septic tank at Point Pleasant is given in the State Board of Health Report for 1909, page 244.

Inspections were made on November 1, 1911, and June 18, 1912, and the plant was reported to be in a satisfactory condition.

PRINCETON.—The three sewage disposal plants serving the Borough of Princeton, known as the "College System," "The West System" and "The Northeast System," have been described in the State Board of Health Report for 1909, page 244. There is another plant called the "White City Plant." which serves a group of dwellings near the College Athletic Field. This plant consists of two concrete septic tanks used in series. The first is to retain the solids; the second overflows to a distributing ditch which extends along the brow of the hill. At various places along this ditch are outlets, through which the sewage flows to the hillside, where it is absorbed by the ground.

These plants were inspected on November 16, 1911, January 3, February 9, March 25, April 24, June 3, July 30, and October 30, 1912. During the first part of the year the sand filters at the Northeast Field were not in use. The sewage was turned out on the ploughed ground. During the wet weather this field is utterly inadequate to handle the sewage as the flow is not changed often enough the sewage simply runs across the surface of the ground and into

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the little brook discharging into Carnegie Lake. The effluent and brook have always been in a very unsatisfactory condition.

On April 24th the flow has been turned back to the sand beds, but raw sewage was still running from a large pool on the field, directly to the brook, which at times was virtually an open sewer. The sewage had again been turned to the field on June 3rd, and was running directly to the brook, and constituted practically the entire flow of the brook.

On July 30th the sand beds were found in use and were in good condition, turning out a non-putrescible effluent.

Plans for two additional sand filters for this plant were submitted and the Board, at a meeting held August 20, 1912, approved them, provided the new filters were installed prior to November 1, 1912.

At the inspection on October 30th one of the new beds was found in operation, but the second new bed was not completed.

At the College Field the flow has not been changed frequently enough, but with the exception of a serious break in March, which let a large pond of sewage directly into the lake, no sewage has escaped from the field. There was a considerable flow from the field to a hollow in the woods, during the spring, but at last inspection this was stopped, and the hollow nearly dried out. The field was handling the sewage very satisfactorily at that time.

The flow at the West Field is practically never changed, and although the sewage is well taken care of during the dry weather, some sewage escapes to the brook in the spring when the ground is full of water.

The White City plant is well able to handle the sewage flow at that place, but like all the others would give better results if proper attention were given to the operation.

QUARRYVILLE.—Horton and Lewis Cream Company. See State Board of Health Report for 1910, page 367.

RAHWAY.—New Jersey State Reformatory. The sewage disposal plant, consisting of a biolytic tank and hypochlorite disinfection plant for treating the sewage of the New Jersey State Reformatory at Rahway, has been described in the State Board of Health Report for 1910, page 367.

The plant was inspected on January 9, 1912. At this time the biolytic tank was found to be out of service, the hypochlorite of lime being applied to the sewage just after passing the screens, as it enters the detention tanks. About 25 pounds of hypochlorite of lime are used per day, which with the estimated flow, gives about 5.5 parts per million of available chlorine.

RAHWAY.—At a meeting of the Board, held December 27, 1911, an extension of time until October 10, 1912, was granted to Rahway in which to install a sewage disposal plant. At a meeting on January 2, 1912, a report and plans, relative to a joint sewage disposal system for the Rahway Valley, including Rahway and Cranford, were approved. Plans for extensions to the sewers of Rahway were approved by the Board, at a meeting held March 19, 1912, subject to the notice given by the Board to the City of Rahway to cease polluting the waters of the Rahway River prior to October 10, 1912.

RALSTON.—See State Board of Health Report for 1910, page 368.

RED BANK.—A description of the septic tanks at Red Bank has been given in the State Board of Health Report for 1909, page 245.

Inspections were made on February 20 and May 8, 1912, and at both times it was reported that the septic effluent was run directly to the Shrewsbury River without any further treatment. In view of the fact that oysters are floated in the river below this point, further purification of this sewage was demanded, and plans for changes at the plant were submitted and approved, by vote of the Board on July 30, 1912 subject to the submission of resolutions by the Borough Council to the effect that the system shall be installed prior to November 1, 1912. These changes include a division wall through the septic

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tank and the installation of a hypochlorite disinfection plant. Plans for further extensions to the sewers of Red Bank were approved by the Board at meetings held August 20 and October 1, 1912, subject to the installation of proposed changes at the sewage disposal plant prior to November 1, 1912.

RIDGEWOOD.—A general description of the sewage disposal plant at Ridgewood will be found in the State Board of Health Report for 1909, page 246. Since this description was written many changes have been made in the plant. During the past year the new septic tanks described in the State Board of Health Report for 1911, page 332, have been put in operation.

Inspections were made on December 28, 1911, January 25, February 2, April 26, August 8, and September 27, 1912. The old septic tank was cleaned out in April, and since then the effluent from the new tanks has been passed through it before going to the contact beds. The first reports showed the plant in an unsatisfactory condition. In April a man was engaged to put all his time to the care of the plant, and improvements were hoped for, but the August inspections showed the contact beds to be in very bad condition, the ridges being overgrown with a dense growth of weeds, and the channels seriously clogged with sludge. Following this inspection a letter was sent to the authorities, requesting that the plant be put in proper condition.

At the September inspection the plant was again found in a very unsatisfactory condition.

RIVERSIDE.—The sewage disposal plant at Riverside, consisting of septic tanks, primary contact beds and sand filters, has been described in the State Board of Health Report for 1910, page 368.

An inspection was made January 17, 1912, and it was found that for a while it had been necessary to run all the contact beds continuously as the extreme cold weather froze the siphon seals.

Other inspections were made on April 8, May 31, July 11, and September 4, 1912, and the plant reported to be in a satisfactory condition. On account of the amount of sewage passing through the plant very frequent cleanings of the sand beds have been necessary. This has so reduced the depth of the filtering material that it will soon be necessary to replace sand.

Although the plant is considerably overloaded it turns out a clear and bright effluent. Daily tests by the attendants have, with a few exceptions, proved this to be non-putrescible.

By vote of the Board at a meeting held on April 9, 1912, the authorities of Riverside Township were ordered to remove an overflow pipe running from a manhole of the sewer on Polk Street into the creek. This overflow was not removed and by vote of the Board at a meeting held August 20, 1912, the matter was referred to the Attorney-General for action.

ROEBLING.—The Roebling sewage disposal plant, comprising screens, septic tanks, dosing tank, primary and secondary contact beds and sand filters, have been described in the State Board of Health Report for 1910, page 368.

An inspection was made on January 11, 1912, and the plant reported in good condition. At a later inspection on March 5, 1912, the same beds were reported to be very dirty and the contact effluent was by-passed directly to the river. The owners were then instructed to put the plant in proper operating condition. Some improvement was noted at the inspection on April 25, 1912, and on June 27, 1912, the plant was reported in a satisfactory condition, with the exception that the by-pass mentioned above had not been removed.

On September 3, 1912, an inspection showed that the plant was in a satisfactory condition, but the sludge bed was found to be inadequate and the presence of objectionable by-passes was reported.

The effluent from the plant is clear and bright, but about half the samples taken have proved to be putrescible.

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Plans for various extensions to the sewers of Roebling were approved by the Board at a meeting held on November 28, 1911.

RUMSON.—A small sewage disposal system is in course of construction by the Rumson Land and Development Company of Rumson. An inspection on July 5, 1912, showed that construction had not been completed.

SALEM.—Plans for a sewer system and sewage disposal plant for the City of Salem were approved by the Board at a meeting held March 25, 1912, subject to a notice previously given by the Board to the City of Salem, to cease polluting the waters of the Delaware River and its tributaries, prior to September 1, 1913, subject to minor changes in the plans and subject to the action of the Board taken at a meeting held March 19, 1912, allowing the City of Salem to defer the construction of the sewage disposal plant until such time as the cities and towns on the Delaware River above Salem discontinue polluting the waters of said river.

SEA GIRT.—A description of the septic tank at Sea Girt is given in the State Board of Health Report for 1910, page 369.

Inspections were made on November 1, December 12, 1911, and February 27, 1912, and although the tanks were in a satisfactory condition, the outfall pipe had not been laid. At an inspection on June 18, 1912, it was learned that the outfall pipe was laid in April, thus eliminating the nuisance on the beach.

SEA GIRT.—State Camp. The septic tank at the State Camp, Sea Girt, is described in the State Board of Health Report for 1910, page 369.

An inspection was made on November 1, 1911, and the tank reported to be in a satisfactory condition. When visited on June 18, 1912, the tank could not be inspected on account of rifle practice going on, but it was undoubtedly all right as it had received practically no use since the previous inspection. Earlier in the spring some trouble was experienced with one of the pumps, but it was repaired and has worked satisfactorily since.

SEA ISLE CITY.—At a meeting of the Board, held November 14, 1911, plans for a sewage disposal plant and intercepting main sewer for Sea Isle City were approved and at a meeting held February 13, 1912, the Board approved amended plans for trunk line and outfall sewers.

SEASIDE PARK.—At a meeting held on July 9, 1912, the Board granted an extension of time until June 1, 1913, to the Borough of Seaside Park in which to install a sewage disposal plant.

SECAUCUS.—Plans for a sewage disposal system for the western part of Clarendon, in the Borough of Secaucus, were approved by the Board at a meeting held on April 29, 1912.

SHARPTOWN.—Plans for a sewage disposal system for the treatment of sewage from the creamery of William Richman at Sharptown were approved by the Board at a meeting held July 30, 1912.

SKILLMAN.—New Jersey State Village for Epileptics. The new sewage disposal plant for the New Jersey State Village for Epileptics at Skillman has been completed this past year. The system comprises septic tank, stone contact beds and sand filters.

The septic tank is divided longitudinally into two sections, each 6 feet by 22 feet. The depth to the flow line is 6 feet 6 inches at the inlet and 3 feet 6 inches at the outlet end. The floor slopes from all sides to a point, from which is a connection to the sludge drain, the depth at this point being 10 feet.

Inlet and outlet troughs extend across the entire end of the tank so that the sections may be used one or both at a time.

The contact beds, of which there are two, are 25 feet by 40 feet, and are filled to a depth of 6 feet with broken stone, ranging from three-quarters to one-and-one-half inches in size. The dosing is controlled by an automatic

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tipping frame, and the beds are to be operated on the fill and draw plan. All masonry in the septic tanks and contact beds is of reinforced concrete.

The sand beds, of which there are four, are somewhat irregular in shape. The total area is about one acre. Each contact bed can dose two sand beds, a gate chamber being located between the two so that they may be alternated. These gates are hand operated.

The distribution is accomplished by troughs leading from the gate chambers nearly to the opposite side of the beds. This trough is 8 inches deep and varies in width from 12 inches at the gate chamber to 5 inches at the end. At each change in width are adjustable gates through which the sewage escapes to the surface of the bed. The sides of the trough are of two inch plank and the bottom is a slab of concrete, 4 inches in depth and reinforced with 3 inch, number 10, expanded metal.

The underdrainage system consists of a main collecting drain passing under the entire length of the four beds. This is 6 inch pipe in the upper two beds and 8 inch pipe in the lower two. The laterals draining to this are 4 inch pipe laid on 8 foot centers at practically right angles to the main collector. They are laid 3 feet, 6 inches below the surface of the filters and are surrounded on all sides by 8 inches of clean gravel.

The effluent is discharged into Rock Brook at the lower end of the filters.

The plant was visited on April 12 and May 27, 1912, and was reported nearly completed.

An inspection on October 9, 1912, found the plant ready for operation.

SMITH'S LANDING.—Atlantic County Asylum for the Insane. A description of the hypochlorite disinfection plant treating the sewage of the Atlantic County Asylum for the Insane at Smith's Landing, is given in the State Board of Health Report for 1911, page 333.

The plant was visited on July 23, 1912. The sedimentation tank was found nearly filled with solids; the hypochlorite solution tank was empty and no disinfectant was being added to the sewage. The bacterial examination showed an unsatisfactory removal of bacteria. This seems to be due to the fact that the disinfectant is added to the sewage before sedimentation, and before the solids are sufficiently broken up to receive efficient disinfection, and a reinoculation of the liquid takes place when these solids disintegrate. As a result of this inspection, the authorities at the asylum were instructed to clean out the sedimentation tank and otherwise put the plant in proper operating condition.

SMITHVILLE.—The septic tank and tile absorption system of sewage disposal at Smithville are described in the State Board of Health Report for 1911, page 333. The plant was visited on March 4, 1912, and was found in very good condition.

SOMERVILLE.—By vote of the Board at a meeting held on November 28, 1911, a new notice was served on the authorities of the Borough of Somerville to cease polluting the Raritan River prior to September 1, 1913. At a meeting of the Board on July 9, 1912, plans for various extensions to the sewers of Somerville were approved subject to the aforementioned notice.

SOUTH BOUND BROOK.—Plans were approved by the Board at a meeting held August 6, 1912, for a sewage disposal system for the Borough of South Bound Brook.

SOUTH ORANGE.—Plans for a sewer system in the Hiltonia district of South Orange Township were approved by the Board at a meeting held on June 4, 1912.

SOUTH RIVER.—Amended plans for a sewage disposal system for the Borough of South River were approved by the Board at a meeting held January 30, 1912. By vote of the Board at a meeting held on August 20, 1912, the

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authorities of the Borough of South River were ordered to cease making connections with their sewer system until their sewage disposal plant is completed.

SPRING LAKE.—A description of the three septic tanks at Spring Lake will be found in the State Board of Health Report for 1909, page 246.

On November 2, 1911, the Pitney Avenue and Brighton Avenue tanks were reported in a satisfactory condition, the Pennsylvania Avenue tank not being located at that time.

On June 17, 1912, the Pennsylvania Avenue tank was inspected and reported to contain a considerable amount of solids. It should be cleaned again before another season opens.

The Brighton Avenue tank was reported to be in good condition on this date.

The manhole covers of the Pitney Avenue tank are buried underneath the road surface and on this account the tank was not inspected in June.

STONE HARBOR.—The hypochlorite disinfection plant at Stone Harbor has been described in the State Board of Health Report for 1909, page 247.

Plans for a sewer system for Stone Harbor were approved by the Board at a meeting held May 21, 1912, subject to the submission of plans for a purification plant and detailed sketches of proposed flush tank.

SUMMIT.—Plans for various extensions to the sewers of the City of Summit were approved by the Board at meetings held on June 11, 1912, and July 9, 1912.

SUSSEX.—At a meeting of the Board held October 22, 1912, a two year's extension of time was granted to the Borough of Sussex in which to construct a sewage disposal plant.

THREE BRIDGES.—See the State Board of Health Report for 1911, page 334.

TRENTON.—Plans for various extensions to the sewers of the City of Trenton have been approved by the Board at different meetings held in the course of the past year, subject to the notice previously given by the Board to the City of Trenton, to cease polluting the waters of the Delaware River prior to January 1, 1913.

Plans for a sewage disposal plant for the City of Trenton were not approved by the Board at a meeting held on December 19, 1911, because of their experimental nature and the fact that the Board was not assured that the plant would prove satisfactory.

At a meeting held on June 4, 1912, the Board refused to approve additional plans for extensions to the sewers of Trenton until such a time as plans and specifications had been filed with the Board and approved by them, for a sewage disposal system to adequately and efficiently treat the entire amount of sewage from said City, together with a resolution from the Board of Commissioners of said City, to the effect that if said plans are approved the disposal system would be installed prior to January 1, 1913.

At a meeting of the Board held October 29, 1912, it was voted that: plans now before the Board for extensions to the sewers of Trenton be approved when a resolution is received from the City Commissioners to the effect that plans for a sewage disposal plant for the City will be submitted and the plant installed within a certain time.

TRENTON.—Agasote Millboard Company. On October 10, 1911, plans of a sewage disposal plant to consist of septic tank, primary contact beds, and sand filters for the Agasote Millboard Company, were approved by the Board.

The place was visited on May 3, 1912, to ascertain what progrees had been made in the construction of the plant, and it was found that the work was not yet started, although the brook was very seriously polluted by wastes from the factory. The Board, by vote on May 14, 1912, then ordered the Company to have their plant constructed and in operation by July 15, 1912.

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A full description of this plant will be given when completed.

TRENTON.—DeLaval Steam Turbine Company. The disposal plant, consisting of septic tanks, and stone filter, of the DeLaval Steam Turbine Company at Trenton is described in the State Board of Health Report for 1911, page 334. Inspections were made on November 29, 1911, January 19, April 4, and August 2, 1912, and with the exception of an occasional sticking of the automatic valve of the dosing tank, the plant has been found in good condition. The effluent has always been putrescible, but little more could be expected of a shallow stone filter giving no contact period.

TRENTON.—I. O. O. F. Home. The sewage disposal plant of the I. O. O. F. Home at Trenton, consisting of pumping station and sand filters, has been described in the State Board of Health Report for 1909, page 247.

Inspections were made on November 29, 1911, January 19, and August 2. 1912. In every instance the distribution of the sewage over the sand beds was reported very poor, and re-grading was recommended. All samples of the effluent from these filters have been non-putrescible.

TRENTON.—Oaklyn Realty Company. Plans for a sewage disposal plant for the Oaklyn Realty Company of Trenton were approved by the Board at a meeting held August 27, 1912.

TRENTON.—Pennsylvania Railroad Shops. The septic tank of the Pennsylvania Railroad shops at Trenton, has been described in the State Board of Health Report for 1911, page 334. It was inspected on April 4, 1912, and was reported in a satisfactory condition.

VENTNOR.—The two hypochlorite disinfection plants for treating the sewage of Ventnor have been described in the State Board of Health Report for 1911, page 334.

An inspection was made on July 23, 1912, and both plants were reported in very bad condition.

At the Little Rock Avenue plant the following conditions were found to prevail: The tide gates on the outfall pipe were not operating and never have; the outfall pipe was not carried far enough out into the Thoroughfare; fresh fecal matter was issuing from the outfall and lodging on the shore, giving rise to very offensive odors, and very unsatisfactory removal of bacteria. This last condition is probably due to the lack of breaking up of the solids in the sewage, and the consequent imperfect mixing of the disinfectant with the sewage. There is also apparently very little storage period at low tide.

At the Ventnor Water Works plant the ejectors were found to be out of commission and the raw sewage was being by-passed directly to the Thoroughfare without even screening.

Following this inspection the authorities of Ventnor City were instructed to put their plants in proper operating condition, and to remove the by-pass at the water works plant.

When visited on July 31, 1912, the piles and pipes were on the ground for extending the outfall pipe into the channel of the Thoroughfare. The other conditions were the same as before.

At a meting of the Board held on March 26, 1912, an extension of time until January 1, 1913, was granted to the residents of the City of Ventnor in which to discontinue pollution of Absecon Inlet and its tributaries.

VENTNOR HEIGHTS.—Plans for a sewer system for Ventnor Heights were approved by the Board at a meeting held on August 6, 1912, subject to the elimination of a temporary outlet.

VERONA.—Newark City Home for Truant Boys. The sub-surface irrigation system of sewage disposal for the Newark City Home for Truant Boys at Verona, has been described in the State Board of Health Report for 1909,

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page 240. An inspection was made on December 8, 1911, and the plant was reported in very bad condition. The screens were not kept clean and the irrigation lines were not changed often enough. On inspection on April 23, 1912, conditions were found even worse. The settling tank was completely filled with solids and the screens so clogged that sewage had overflowed the top of the tank. The irrigation lines were all completely clogged and the small gate boxes at the upper end of these lines were virtually miniature septic tanks. Sewage had overflowed the tops of some of these gate boxes and run over the surface of the ground directly to the brook.

At the time of heavy rains in the early part of April the entire irrigation field was inundated, completely putting it out of commission.

On August 23, 1912, the plant was again found in a very bad condition. All the galleries were so clogged that no liquid could get through, and ditches had to be dug from the gate to conduct the raw sewage directly to the stream.

Another inspection was made on September 26, 1912, and conditions were very unsatisfactory.

Samples of the effluent from this plant have always been putrescible.

VINELAND.—A description of the sewage disposal plant at Vineland, consisting of settling basins, sand filters, and hypochlorite disinfection plant, is given in the State Board of Health Report for 1909, page 247.

It was inspected on February 19 and September 11, 1912, and it was reported that the several beds were so badly clogged that they never drain. The sand beds were in fair condition and the effluent was clear and bright, but putrescible. The bacterial reduction was, however, very good.

VINELAND.—New Jersey Training School for Feeble-Minded Girls and Boys. The sewage disposal plant of the New Jersey Training School for Feeble-Minded Girls and Boys at Vineland is described in the State Board of Health Report for 1911, page 335.

It was inspected on February 19 and September 11, 1912. Two of the old beds were very badly clogged but a new bed of about an acre has been constructed and this was receiving the sewage.

This bed is divided longitudinally into four beds, so that the flow may be changed occasionally. In the spring sewage farming is to be tried on these areas.

WASHINGTON.—The sewage disposal plant at Washington, comprising grit chamber, septic tanks, primary contact beds, and sand filters, has been described in the State Board of Health Report for 1911, page 336.

The plant was inspected on January 16, February 16. April 29, August 16 and September 18, 1912.

During the winter considerable trouble was experienced with the automatic apparatus freezing. Other than this the plant has been reported in excellent condition. The attendant made daily tests for putrescibility until May 1, 1912, and all showed the effluent to be non-putrescible. Samples taken by a representative of this Division have also been non-putrescible.

WATER WITCH.—The septic tank for treating the sewage of Water Witch has been described in the State Board of Health Report for 1909, page 247. An inspection of this tank made on August 26, 1912, showed that the tank was in need of cleaning.

WENONAH.—There are two sewage disposal plants at Wenonah, both of which are described in the State Board of Health Report for 1909, page 247.

Inspections were made on November 2, 1911, May 20 and September 10, 1912. In all instances the Princeton Avenue plant was by-passed, the sewage running to an old cesspool, thence in a ditch toward the creek. It soaked into the ground, however, before reaching the stream. Matters were much

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worse at the Mantua Avenue plant. Here the sand beds were so clogged that none of the sewage was able to drain down through it, but simply runs over the surface and into the swamp, thence to the creek. This swamp was very filthy, constituting nothing more nor less than an open cesspool. There are two principal reasons for the present condition of this plant: faulty design and lack of attention. Although there are three sand beds they are arranged in series, the effluent from one going to the next, and so on, and as there is only one series this is obliged to be in service all the time unless the sewage is turned to the swamp untreated while the beds are being cleaned. The plant can only be said to be in a disgraceful condition.

WEST ENGLEWOOD.—Plans for a sewer system and sewage disposal plant for West Englewood were approved by the Board at a meeting held August 20, 1912.

WESTFIELD.—The sewage disposal plant at Westfield, consisting of screens and sand beds, has been described in the State Board of Health Report for 1909, page 248.

Inspections were made on January 5, March 13 and May 6, 1912, and in every instance the plant was reported to be heavily overloaded, and sewage was escaping to the brook. The inadequacy of the plant for handling the sewage of the town has long been recognized, and during the past year steps have been taken to remedy conditions. Plans for extensions to the plant were approved by the Board on May 7, 1912.

A full description of this plant will be given when completed.

Various plans for extensions to the sewers of Westfield have been approved by the Board during the past year.

WILDWOOD CREST.—At a meeting of the Board held on April 2, 1912, amended plans for a sewage tank for the Borough of Wildwood Crest were disapproved as they were inadequate and improperly designed.

WOODBURY.—The sewage disposal plant at Woodbury is described in the State Board of Health Report for 1911, page 336.

In April, 1907, the State Sewerage Commission issued orders to the City of Woodbury to make certain changes in the tank so as to make a septic tank of it. At the present writing nothing has been done toward carrying out this order.

The plant was inspected on November 22, 1911, March 27, April 17 and September 10, 1912.

The tank apparently is not attended to properly for at recent inspections, although the tide was coming in, the tank was discharging and the sewage was being carried by the tide up the creek and into the confines of the town.

Under the present method of operation, the tanks are cleaned once per month, at which time there is considerable fresh sludge discharged into the creek, causing a local nuisance for a time. This was the condition found on inspection on March 27th. Instructions were later sent the authorities of Woodbury concerning the manner in which the plant should be run, so as to prevent recurrence of this nuisance.

Plans for an extension to the sewers of Woodbury were approved by the Board at a meeting held on September 17, 1912.

WOODSTOWN.—The sewage disposal plant at Woodstown, consisting of septic tank and sand filters, has been described in the State Board of Health Report for 1909, page 249.

On inspection of November 21, 1911, it was found that the septic tank was almost completely filled with solids, and was in need of cleaning. The sand beds at that time were in very good condition.

On March 27, 1912, the tank was found still full of solids, and the sand beds needed cleaning. During the heavy rains of the preceding month some

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trouble was experienced with the beds on account of high water in the creek. This prevented the beds from draining, and to relieve them by-passes were used to conduct the sewage directly from the surface of the beds to the creek. Orders were immediately sent the Company to remove these by-passes at once. This had not been done, however, when the plant was inspected on June 11, 1912, nor on Sepetmber 10, 1912, when another inspection was made. The company was then told that if they were not removed at once the matter would be referred to the Attorney-General for action.

WOODSTOWN.—Supplee Alderney Dairy. The disposal plant for treating the wastes of the creamery of the Supplee Alderney Dairy at Woodstown, has been described in the State Board of Health Report for 1911, page 337.

Inspections were made on November 21, 1911, March 29, April 25, June 11 and September 10, 1912. On the first two dates the plant was reported in good condition, although the effluent had a very milky appearance. On April 25, however, it was found that the plant was not being properly operated, the settling tanks being pumped out at the same time as the waste liquid was running in. The sprinklers had been removed from the filters and the liquid was being passed directly to the brook, with practically no purification.

WORTENDYKE.—Granite Linen Mills. The sand filters for treating the sewage from the Granite Linen Mills at Wortendyke have been described in the State Board of Health Report for 1910, page 337.

It was inspected on April 26, 1912, and was reported in a satisfactory condition. A further inspection on September 27, 1912, showed the effluent to be clearer and odorless. The sand beds were clogged with paper and pieces of cloth, and accordingly the installation of a settling tank and screen chamber was recommended.

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TABULAR SUMMARY OF THE PRINCIPAL SEWAGE DISPOSAL PLANTS IN THE STATE OF NEW JERSEY.

PLACE.	SERVICE.	SYSTEM.	APPROX. COST.	ENGINEER.
Aldene	Factory	Septic tank, contact filter	.....	G. K. Hooper.
Allenhurst	Municipality	Septic tank	$4,000.00	G. E. Hill.
Asbury Park	Municipality	Septic tank	27,272.77	G. E. Hill.
Asyla	Almshouse & asylum	Screens, septic tank, primary and secondary contact	.....	J. J. Albertson.
Atlantic City (part)	Municipality	Disinfection	.....	F. Herbert Snow.
*Avalon	Municipality	Sedimentation tanks and disinfection	.....	Ralph Goff.
Avon	Municipality	Septic tank	.....	J. H. Emlen.
*Beach Haven	Municipality	Sedimentation tank	.....	Haines & Sherman.
Belmar	Municipality	Septic tank	$14,900.00	Clyde Potts.
*Beverly	Municipality	Sedimentation tanks and disinfection	.....	Clyde Potts.
Bordentown	Municipality	Septic tank, primary and secondary contact, sand filtration.	58,306.70	W. W. Young.
Bradley Beach	Municipality	Septic tank	.....	Niart Rogers.
Bridgeton I	Municipality	Disinfection	5,394.00	Clyde Potts.
Bridgeton II	Municipality	Disinfection	$3,550.00	Clyde Potts.
Brown's Mills	Hotel and cottages.	Septic tank and ground seepage	.....	
Burlington	Municipality	Pump well, settling tank, land filtration	.....	Nat. Gas & Construction Co.
Burlington	Factory	Septic tank, sprinkling filters, sand filtration.	.....	Chas. A. Blatchley.
Caldwell	Prison	Septic tank, tile absorption	.....	
Carlstadt	Municipality	Septic tank	$3,145.00	Wise & Watson.
Changewater	Factory	Septic tank, intermittent sand filtration	.....	F. E. Daniels.
Chatham-Madison	Municipalities	Septic tank, sand filtration	58,696.00	Hering & Fuller– Clyde Potts.
Clinton	Creamery	Chemical precipitation	.....	
Collingswood	Municipality	Septic tank, primary contact	3,600.00	G. E. Hill.
Colt's Neck	Creamery	Chemical precipitation	.....	
Creskill	Municipality	Septic tank, ground seepage	.....	
Deal	Golf Club	Settling tank, flush tank, sand filtration	.....	Niart Rogers.
Deal Beach	Municipality	Septic tank	.....	E. E. Throckmorton.
Delford	Municipality	Septic tank	.....	P. E. Van Buskirk.
East Rutherford	Municipality	Septic tank	$4,650.00	Wise & Watson.
Englewood	Municipality	Imhoff tank	13,238.00	Clyde Potts.

*The plants marked with an asterisk are in process of construction.

TABULAR SUMMARY OF THE PRINCIPAL SEWAGE DISPOSAL PLANTS IN THE STATE OF NEW JERSEY—*Continued.*

PLACE.		SYSTEM.	APPROX. COST.	ENGINEER.
Essex Fells	Municipality	Septic tank, primary contact, sand filtration	6,000.00	Pugh & Hubbard.
Flemington	Municipality	Screens, flush tank, land filtration	5,875.00	Waring, Chapman & Farquhar
Freehold	Municipality	Screens, flush tank, land filtration	7,452.50	Waring, Chapman & Farquhar.
Gibbsboro	Factory I	Septic tank and ground absorption	.....	Harrison & Schreiber.
	Factory II	Septic tank and ground absorption	.....	Harrison & Schreiber.
Glen Gardner	Factory	Septic tank, sprinkling filters, cinder filtration	$8,185.65	Charles McMillan.
Grenloch	Sanatorium	Septic tank, sprinkling filters, sand filtration	.....	Harrison & Schreiber.
Haddonfield	Municipality	Septic tank, sprinkling filters, sand filtration	.....	Alexander Potter.
Haddon Heights	Municipality	Septic tank, coke strainers, flush tank and sand filtration	.....	G. E. Hill.
*Hightstown	Municipality	Septic tank, sand filtration	.....	Waring, Chapman & Farquhar.
Hilliard's Island	Store and residence	Septic tank, sand filtration	.....	
Interlaken	Municipality	Septic tank	3,700.00	G. E. Hill.
Island Heights	Municipality	Sand filtration	.....	
Jamesburg	State Home for Boys	Flush tank, land filtration	.....	
Keyport	Municipality	Disinfection	$5,800.00	Clyde Potts.
Lakehurst	Hotel and cottages.	Septic tank, sand filtration	.....	Boyd McLean.
Lakewood	Municipality	Septic tank, sand filtration	.....	Alexander Potter.
Lawrenceville	School	Septic tank, broad irrigation	.....	J. J. R. Croes.
Loch Arbour	Municipality	Septic tank	$2,950.00	G. E. Hill.
Long Branch	Municipality	Screens	.....	
*Longport	Municipality	Sedimentation tanks	.....	Pugh & Hubbard.
Madison	Residence, stable...	Septic tank, sand filtration	1,009.00	Waring, Chapman & Farquhar.
Mahwah	Factory	Septic tank, sand filtration	1,200.00 to 1,400.00	Waring, Chapman & Farquhar.
Manasquan	Municipality	Septic tank	$4,310.00	Pugh & Hubbard.
Margate City	Municipality	Two disinfection plants	.....	E. B. Phelps.
Medford	Municipality	Septic tank, sand filtration	.....	
Merchantville	Municipality	Septic tank, primary contact, sand filtration	19,500.00	G. E. Hill.
Midland Park	Factory	Sand filters	.....	Hering & Fuller.
Millville	Municipality	Septic tank, aeration well, primary contact, disinfection	$26,577.00	Wm. H. Boardman.

*The plants marked with an asterisk are in process of construction.

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TABULAR SUMMARY OF THE PRINCIPAL SEWAGE DISPOSAL PLANTS IN THE STATE OF NEW JERSEY—*Continued.*

PLACE.	SERVICE.	SYSTEM.	APROX. COST.	ENGINEER.
Montague	Creamery	Chemical precipitation		
Moorestown	Municipality	Septic tank, primary contact		Alexander Potter.
Morris Plains	Asylum	1. Screens, broad irrigation 2. Screens, septic tank, sand beds		Charles McMillan.
Morristown	Municipality	Septic tank, primary and secondary contact, sand filtration.	100,000.00	Williams, Proctor & Potts.
Mullica Hill	Municipality	Sedimentation and sand filtration		
*Neptune Township	Municipality	Sedimentation tank		Pugh & Hubbard.
Neshanic	Creamery	Chemical precipitation		
New Lisbon I	Almshouse	Septic tank, tile absorption		Earl Thompson.
New Lisbon II	Asylum	Septic tank, primary contact		Earl Thompson.
Newton I	Municipality	Septic tank, sand beds	$20,000.00	Williams, Proctor & Potts.
Newton II	Municipality	Septic tank, sand beds	$10,000.00	Williams, Proctor & Potts.
Ocean City	Municipality	Screens, sedimentation, disinfection		E. B. Phelps.
Ocean Grove	Municipality	Two septic tanks	20,400.00	Williams, Proctor & Potts.
Overbrook	Asylum	Septic tank, primary contact, sand filtration	36,273.00	James Owen.
Pemberton	Municipality	Settling pool, broad irrigation		
Plainfield	Municipality	Septic tank, primary and secondary contact beds		Joseph O. Osgood.
Pleasantville	Hotel	Septic tank, primary contact bed		F. E. Daniels.
Point Pleasant	Municipality	Septic tank	$3,800.00	Pugh & Hubbard.
Princeton I	Municipality	Septic tank, sand filtration		W. A. McKenzie.
Princeton II	Municipality	Broad irrigation		
Princeton III	Municipality	Broad irrigation		
Quarryville	Creamery	Septic tank, secondary treatment to be installed		Albright & Mebus.
Ralston	Children's Home	Septic tank, tile absorption		Edward Howell.
Rahway	State Reformatory.	Disinfection		E. B. Phelps.
Red Bank	Municipality	Grit chamber, septic tank		T. H. Grant.
Ridgewood	Municipality	Septic tank, primary contact	$20,687.77	G. E. Hill.
Riverside	Municipality	Septic tank, primary contact, sand filtration	26,898.00	Wm. H. Boardman.
Roebling	Municipality	Septic tank, primary contact, sand filtration		I. Harby.
*Rumson	Municipality	Sedimentation tanks and disinfection		Alexander Potter.

*The plants marked with an asterisk are in process of construction.

TABULAR SUMMARY OF THE PRINCIPAL SEWAGE DISPOSAL PLANTS IN THE STATE OF NEW JERSEY—*Continued.*

PLACE.	SERVICE.	SYSTEM.	APROX. COST.	ENGINEER.
Sea Girt	Municipality	Septic tank	2,800.00	Pugh & Hubbard.
Sea Girt II.....	State Camp	Septic tank	5,475.00	James Owen.
Skillman	State Institution ..	Septic tank, contact beds, land filtration	$3,922.00	Clyde Potts.
Smith's Landing ..	Asylum	Septic tank, disinfection	.....	
Smithville	Municipality	Septic tank, tile absorption	.....	
*South River	Municipality	Septic tank, sand filtration	.....	W. W. Young.
Spring Lake	Municipality	Three septic tanks	9,810.00	Pugh & Hubbard.
Stone Harbor	Municipality	Disinfection	$600.00	E. B. Phelps.
Trenton 1	Factory	Septic tank, flush tank, coke strainer bed	.....	Bact. Sewage Purification Co.
Trenton II	P. R. R. Shops	Septic tanks	.....	Bact. Sewage Purification Co.
Trenton III	I. O. O. F. Home ..	Septic tank, sand filtration	2,800.00	Clyde Potts.
*Trenton IV	Factory	Septic tanks, contact beds, sand filtration	.....	Farley & Braunworth.
Three Bridges	Creamery	Chemical precipitation	.....	
Ventnor	Municipality	Two disinfection plants	.....	E. B. Phelps.
Verona	Newark City Home	Sub-surface irrigation	.....	
Vineland I	Municipality	Settling basin, sand filtration	.....	Alexander Potter.
Vineland II	Children's Home ..	Septic tank, sand filtration	.....	
Washington	Municipality	Septic tank, primary contact, sand filtration	$16,000.00	Clyde Potts.
Water Witch	Municipality	Septic tank	$1,500.00	Bact. Sewage Purification Co.
Wenonah I	Municipality	Septic tank, sand beds	.....	Wm. C. Cattell.
Wenonah II	Municipality	Septic tank	.....	Wm. C. Cattell.
Westfield	Municipality	Screens, land filtration	.....	
Woodbury	Municipality	Detention tidal tank	.....	William Easby.
Woodstown	Municipality	Septic tank, sand beds	$2,722.00	G. E. Hill.
Woodstown	Creamery	Chemical precipitation, cinder filtration	.....	

* The plants marked with an asterisk are in process of construction.

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RECORD OF ANALYSES OF

RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Aldene	Aug. 1, 1912	Effluent
Asyla	Nov. 20, 1911	Secondary Effluent
"	Feb. 23, 1912	Secondary Effluent
"	" " "	Primary Effluent
"	May 20, 1912	Secondary Effluent
"	Sept. 10, 1912	Contact Effluent
Atlantic City	Mar. 11, 1912	Disinfection Tank
" "	July 22, 1912	Disinfection Tank
" "	" "	Raw Sewage
Bordentown	Jan. 11, 1912	Treatment Tank
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	Mar. 5, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	April 25, 1912	Contact Effluent
"	" " "	Sand Effluent
"	" " "	Contact Effluent
"	June 27, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Contact Effluent
"	July 9, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 4
"	" " "	Contact Effluent
"	Sept. 6, 1912	Effluent
"	" " "	Effluent—Sand Bed No. 1
Bridgeton (Glass St. Plant)	Mar. 22, 1912	Disinfection Tank
" (Lincoln St. Plant)	Mar. 28, 1912	Disinfection Tank
Brown's Mills	May 15, 1912	Effluent
Burlington	Dec. 15, 1911	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	Mar. 1, 1912	Leak Through Bed No. 4
"	" " "	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 1
"	April 8, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	May 24, 1912	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent, Bed No. 2, nr. junction
"	" " "	Effluent, Bed No. 2, upper basin
"	July 11, 1912	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 2
"	Sept. 5, 1912	Final Effluent
Thomas Devlin Plant		
Burlington	July 11, 1912	Effluent
"	Sept. 4, 1912	Final Effluent
Chancewater	Aug. 16, 1912	Effluent—Sand Bed
"	Sept. 18, 1912	Effluent—Sand Bed

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SEWAGE AND EFFLUENTS.

EXPRESSED IN PARTS PER MILLION.

Turbidity.	Sediment.	SOLIDS.									Chlorine.	NITROGEN AS		
		Total.	Fixed.	Volatile.	Total in Solution.	Fixed in Sol.	Vol. in Sol.	Total in Suspension.	Fixed in Susp.	Vol. in Susp.		Total (Kjel).	Total (Kj.) in Sol.	Free Ammonia.

RECORD OF ANALYSES OF

RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Aldene	Aug. 1, 1912	Effluent
Asyla	Nov. 20, 1911	Secondary Effluent
"	Feb. 22, 1912	Secondary Effluent
"	" " "	Primary Effluent
"	May 20, 1912	Secondary Effluent
"	Sept. 10, 1912	Contact Effluent
Atlantic City	Mar. 11, 1912	Disinfection Tank
" "	July 22, 1912	Disinfection Tank
" "	" " "	Raw Sewage
Bordentown	Jan. 11, 1912	Treatment Tank
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	Mar. 5, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	April 25, 1912	Contact Effluent
"	" " "	Sand Effluent
"	" " "	Contact Effluent
"	June 27, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Contact Effluent
"	July 9, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 4
"	" " "	Contact Effluent
"	Sept. 6, 1912	Effluent
"	" " "	Effluent—Sand Bed No. 1
Bridgeton (Glass St. Plant)	Mar. 22, 1912	Disinfection Tank
" (Lincoln St. Plant)	Mar. 28, 1912	Disinfection Tank
Brown's Mills	May 15, 1912	Effluent
Burlington	Dec. 15, 1911	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	Mar. 1, 1912	Leak Through Bed No. 4
"	" " "	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 1
"	April 8, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	May 24, 1912	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent, Bed No. 2 nr. junction
"	" " "	Effluent, Bed No. 2, upper basin
"	July 11, 1912	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 2
"	Sept. 5, 1912	Final Effluent
Thomas Devlin Plant		
Burlington	July 11, 1912	Effluent
"	Sept. 4, 1912	Final Effluent
Changewater	Aug. 16, 1912	Effluent—Sand Bed
"	Sept. 13, 1912	Effluent—Sand Bed

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SEWAGE AND EFFLUENTS.

EXPRESSED IN PARTS PER MILLION.

NITROGEN AS				OXYGEN CONSUMED (30 min. boiling.)			BACTERIA (per cc.)				
Organic (diff.)	Organic (diff.) in Sol.	Nitrites.	Nitrates.	Total.	In Solution.	Oxygen Dissolved.	At 20° C.	At 37° C.	Red Colonies at 37° C.	B. Coli.	Relative Stability (per cent.)
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53
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.....	.....	.....	.....	.....	.....	.....	351,000	.....	0	1,000	.....
.....	.....	.....	.....	.....	.....	.....	30,000	9,200	4,000	1,000+	.....
.....	.....	.....	.....	.....	.....	.....	600,000	216,000	43,000	10,000+	.....
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.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	143,500	.....	1,500	1,000+	.....
.....	.....	.....	.....	.....	.....	.....	217,500	.....	250	1,000	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50
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.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50
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.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+

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RECORD OF ANALYSES OF
RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Chatham-Madison	Feb. 5, 1912	Primary Contact Effluent
" "	" " "	Secondary Contact Effluent
" "	" " "	Effluent
" "	June 20, 1912	Effluent
" "	" " "	Primary Contact Effluent
" "	June 28, 1912	Effluent
" "	" " "	Primary Contact Effluent
" "	" " "	Effluent
" "	July 29, 1912	Raw Sewage
" "	" " "	Effluent
" "	Aug. 20, 1912	Effluent
" "	Oct. 21, 1912	Final Effluent
Collingswood	Dec. 29, 1911	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 2
"	Jan. 18, 1912	Contact Effluent
"	Mar. 14, 1912	Effluent—Bed No. 2
"	July 18, 1912	Effluent—Bed No. 4
"	" " "	Raw Sewage
"	July 22, 1912	Effluent—Contact Bed No. 2
"	Sept. 9, 1912	Effluent—Contact Bed No. 4
Essex Fells	Dec. 8, 1911	Effluent
" "	April 22, 1912	Eff., Filter No. 2, Lower Beds
" "	" " "	Eff., Filter No. 2, Upper Beds
" "	Sept. 26, 1912	Effluent—Gravel Bed
Flemington	Dec. 13, 1911	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 4
"	June 21, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
Freehold	Dec. 2, 1911	Effluent
"	Mar. 22, 1912	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 5
"	" " "	Effluent—Bed No. 6
"	May 22, 1912	Effluent—Bed No. 5
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 1
Glen Gardner	Jan. 8, 1912	Effluent—Sprinkling Filter
" "	" " "	Effluent
" "	Aug. 16, 1912	Effluent—Sprinkling Filter
Haddonfield	Nov. 20, 1911	Effluent—Sand Filter
"	" " "	Effluent—Settling Basin
"	Feb. 6, 1912	Effluent—Sprinkling Filter
"	" " "	Effluent—Settling Basin
"	April 18, 1912	Effluent—Sprinkling Filter
"	" " "	Effluent—Sand Filter
"	June 5, 1912	Effluent—Sand Filter
"	" " "	Effluent—Sprinkling Filter
"	July 22, 1912	Effluent—Sprinkling Filter
"	Aug. 5, 1912	Effluent—Sprinkling Filter
"	" " "	Effluent—Sand Filter
"	Sept. 9, 1912	Effluent—Sand Filter

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SEWAGE AND EFFLUENTS.

EXPRESSED IN PARTS PER MILLION.

		SOLIDS.										NITROGEN AS		
Turbidity.	Sediment.	Total.	Fixed.	Volatile.	Total in Solution.	Fixed in Sol.	Vol. in Sol.	Total in Suspension.	Fixed in Susp.	Vol. in Susp.	Chlorine.	Total (Kjel).	Total (K.) in Sol.	Free Ammonia.
240	760	1536	650	886	608	342	266	928	308	620	110	95	48	36
80	10	560	376	184	548	368	180	12	8	4	180	55	30	17
100	30	374	202	172	322	202	120	52	0	52	100	55	50	27
125	55	402	202	200	388	182	206	14	20	.....	80	55	50	25

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RECORD OF ANALYSES OF
RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Chatham-Madison	Feb. 5, 1912	Primary Contact Effluent
" "	" " "	Secondary Contact Effluent
" "	" " "	Effluent
" "	June 20, 1912	Effluent
" "	" " "	Primary Contact Effluent
" "	June 28, 1912	Effluent
" "	" " "	Primary Contact Effluent
" "	" " "	Effluent
" "	July 29, 1912	Raw Sewage
" "	" " "	Effluent
" "	Aug. 20, 1912	Effluent
" "	Oct. 21, 1912	Final Effluent
Collingswood	Dec. 29, 1911	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 2
"	Jan 18, 1912	Contact Effluent
"	Mar. 14, 1912	Effluent—Bed No. 2
"	July 18, 1912	Effluent—Bed No. 4
"	" " "	Raw Sewage
"	July 22, 1912	Effluent—Contact Bed No. 2
"	Sept. 9, 1912	Effluent—Contact Bed No. 4
Essex Fells	Dec. 8, 1911	Effluent
" "	April 22, 1912	Eff., Filter No. 2, Lower Beds
" "	" " "	Eff., Filter No. 2, Upper Beds
" "	Sept. 26, 1912	Effluent—Gravel Bed
Flemington	Dec. 13, 1911	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 4
"	June 21, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
Freehold	Dec. 2, 1911	Effluent
"	Mar. 22, 1912	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 5
"	" " "	Effluent—Bed No. 6
"	May 22, 1912	Effluent—Bed No. 5
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 1
Glen Gardner	Jan. 8, 1912	Effluent—Sprinkling Filter
" "	" " "	Effluent
" "	Aug. 16, 1912	Effluent—Sprinkling Filter
Haddonfield	Nov. 20, 1911	Effluent—Sand Filter
"	" " "	Effluent—Settling Basin
"	Feb. 6, 1912	Effluent—Sprinkling Filter
"	" " "	Effluent—Settling Basin
"	April 18, 1912	Effluent—Sprinkling Filter
"	" " "	Effluent—Sand Filter
"	June 5, 1912	Effluent—Sand Filter
"	" " "	Effluent—Sprinkling Filter
"	July 22, 1912	Effluent—Sprinkling Filter
"	Aug. 5, 1912	Effluent—Sprinkling Filter
"	" " "	Effluent—Sand Filter
"	Sept. 9, 1912	Effluent—Sand Filter

Digitized by Google

SEWAGE AND EFFLUENTS.

EXPRESSED IN PARTS PER MILLION.

NITROGEN AS				OXYGEN CONSUMED (30 min. boiling.)		Oxygen Dissolved.	BACTERIA (per cc.)				Relative Stability (per cent.)
Organic (diff.)	Organic (diff.) in Sol.	Nitrites.	Nitrates.	Total.	In Solution.		At 20° C.	At 37° C.	Red Colonies at 37° C.	B. Coli.	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.7	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.8	.....	.....	.....	.....	15
59	12	.03	0	283	77	.....	615,000	248,000	.....	10,000	.....
38	13	.40	.10	56	55	.....	440,000	100,000	.....	1,000	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58
28	23	.03	.40	106	92	.....	.....	.....	.....	.....	15
30	25	.10	0	140	129	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95

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RECORD OF ANALYSES OF
RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Haddon Heights	Dec. 29, 1911	Effluent—Bed No. 6
" "	" " "	Effluent—Bed No. 3
" "	Jan. 30, 1912	Septic Effluent
" "	" " "	Raw Sewage
" "	" " "	Septic Effluent
" "	" " "	Effluent—Bed No. 5
" "	" " "	Effluent—Bed No. 5
" "	Jan. 31, 1912	Effluent—Bed No. 2
" "	Feb. 7, 1912	Effluent—Bed No. 5
" "	" " "	Raw Sewage
" "	" " "	Septic Effluent
" "	" " "	Effluent—Sand Beds
" "	" " "	Septic Effluent
" "	Feb. 16, 1912	Effluent—Sand Beds
" "	Mar. 14, 1912	Effluent—Bed No. 5
" "	April 19, 1912	Effluent—Sand Beds
" "	June 5, 1912	Effluent—Sand Beds
" "	Sept. 9, 1912	Effluent—Sand Beds
Island Heights	Mar. 6, 1912	Effluent—Bed No. 1
" "	" " "	Effluent—Ditch
" "	June 4, 1912	Effluent—Sand Bed
" "	" " "	Effluent—Sand Bed
Jamesburg	Dec. 9, 1911	Effluent
"	" " "	Effluent
"	" " "	Stream Below Filter Plant
"	" " "	Stream Below Filter Plant
"	" " "	Effluent
"	Mar. 22, 1912	Effluent
"	" " "	Effluent
"	" " "	Stream Below Disposal Plant.
"	May 22, 1912	Effluent
"	" " "	Effluent
"	" " "	Brook Water
Lakehurst	Jan. 2, 1912	Effluent
"	May 21, 1912	Effluent—Sand Filter
Lakewood	Jan. 4, 1912	Effluent—Bed No. 4
"	Mar. 4, 1912	Effluent—Beds Nos. 1 and 3
"	" " "	Effluent—Beds Nos. 2 and 4
"	May 2, 1912	Effluent—2 Upper Beds
"	" " "	Effluent—2 Lower Beds
"	June 6, 1912	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 1
Mahwah	Sept. 27, 1912	Final Effluent
Medford	Dec. 15, 1911	Effluent
Merchantville	Feb. 1, 1912	Effluent
"	" " "	Effluent—Bed No. 5
"	" " "	Effluent—Bed No. 6
"	Mar. " 1912	Effluent
"	" " "	Effluent
"	April 12, 1912	Effluent
"	May 6, 1912	Effluent
"	Sept. 5, 1912	Final Effluent—Sand Beds
"	Oct. 8, 1912	Effluent—Contact Bed No. 3
"	" " "	Effluent—Contact Bed No. 4
Millville	Dec. 14, 1911	Septic Effluent

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SEWAGE AND EFFLUENTS.

EXPRESSED IN PARTS PER MILLION.

Turbidity.	Sediment.	SOLIDS.										Chlorine.	NITROGEN AS		
		Total.	Fixed.	Volatile.	Total in Solution.	Fixed in Sol.	Vol. in Sol.	Total in Suspension.	Fixed in Susp.	Vol. in Susp.			Total (Kjel).	Total (Kj.) in Sol.	Free Ammonia.

RECORD OF ANALYSES OF
RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Haddon Heights	Dec. 29, 1911	Effluent—Bed No. 6
" "	" " "	Effluent—Bed No. 3
" "	Jan. 30, 1912	Septic Effluent
" "	" " "	Raw Sewage
" "	" " "	Septic Effluent
" "	" " "	Effluent—Bed No. 5
" "	" " "	Effluent—Bed No. 5
" "	Jan. 31, 1912	Effluent—Bed No. 2
" "	Feb. 7, 1912	Effluent—Bed No. 5
" "	" " "	Raw Sewage
" "	" " "	Septic Effluent
" "	" " "	Effluent—Sand Beds
" "	" " "	Septic Effluent
" "	Feb. 16, 1912	Effluent—Sand Beds
" "	Mar. 14, 1912	Effluent—Bed No. 5
" "	April 19, 1912	Effluent—Sand Beds
" "	June 5, 1912	Effluent—Sand Beds
" "	Sept. 9, 1912	Effluent—Sand Beds
Island Heights	Mar. 6, 1912	Effluent—Bed No. 1
" "	" " "	Effluent—Ditch
" "	June 4, 1912	Effluent—Sand Beds
" "	" " "	Effluent—Sand Beds
Jamesburg	Dec. 9, 1911	Effluent
"	" " "	Effluent
"	" " "	Stream Below Filter Plant
"	" " "	Stream Below Filter Plant
"	" " "	Effluent
"	Mar. 22, 1912	Effluent
"	" " "	Effluent
"	" " "	Stream Below Disposal Plant.
"	May 22, 1912	Effluent
"	" " "	Effluent
"	" " "	Brook Water
Lakehurst	Jan. 2, 1912	Effluent
"	May 21, 1912	Effluent—Sand Filter
Lakewood	Jan. 4, 1912	Effluent—Bed No. 4
"	Mar. 4, 1912	Effluent—Beds Nos. 1 and 3.
"	" " "	Effluent—Beds Nos. 2 and 4..
"	May 2, 1912	Effluent—2 Upper Beds
"	" " "	Effluent—2 Lower Beds
"	June 6, 1912	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 1
Mahwah	Sept. 27, 1912	Final Effluent
Medford	Dec. 15, 1912	Effluent
Merchantville	Feb. 1, 1912	Effluent
"	" " "	Effluent—Bed No. 5
"	" " "	Effluent—Bed No. 6
"	Mar. 7, 1912	Effluent
"	" " "	Effluent
"	April 12, 1912	Effluent
"	May 6, 1912	Effluent
"	Sept. 5, 1912	Final Effluent—Sand Beds
"	Oct. 8, 1912	Effluent—Contact Bed No. 3..
"	" " "	Effluent—Contact Bed No. 4..
Millville	Dec. 14, 1911	Septic Effluent

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SEWAGE AND EFFLUENTS.

EXPRESSED IN PARTS PER MILLION.

NITROGEN AS				OXYGEN CONSUMED (30 min. boiling.)			BACTERIA (per cc.)				
Organic (diff.)	Organic (diff.) in Sol.	Nitrites.	Nitrates.	Total.	In Solution.	Oxygen Dissolved.	At 20° C.	At 37° C.	Red Colonies at 37° C.	B. Coli.	Relative Stability (per cent.)
											96+
											48
						2.00					
						2.40					
						0.65					
											20
						8.10					15
											20
						9.20					48
						4.65					
						1.75					
											48
						4.30					
											96+
											96+
											96+
											96+
											96+
											35
											60
											96+
											96+
											63
											35
											58
											35
											35
											35
											38
											38
											20
											15
											40
											15
											38
											35
											58
											58
											60
											35
											68
											50
											96+
											50
											50
											38
											20
											22
											69
											96+
											35
											45
											47
							845,000				

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RECORD OF ANALYSES OF
RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Millville	Dec. 14, 1911	Tidal Tank
"	" " "	Septic Effluent
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 3
"	Dec. 19, 1911	Septic Effluent
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Septic Effluent
"	" " "	Tidal Tank
"	Dec. 20, 1911	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Septic Effluent
"	" " "	Effluent—Bed No. 1
"	Dec. 22, 1911	Septic Effluent
"	" " "	Septic Effluent Before Aeration
"	" " "	Septic Effluent After Aeration
"	" " "	Contact Effluent—Bed No. 4
"	" " "	Contact Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 4
"	" " "	Contact Effluent—Bed No. 4
"	Dec. 23, 1911	Raw Sewage
"	" " "	Septic Effluent
"	" " "	Septic Effluent
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 4
"	" " "	Septic Effluent Before Aeration
"	" " "	Septic Effluent After Aeration
"	" " "	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 3
"	Jan. 12, 1912	Septic Effluent
"	" " "	Contact Effluent
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	Jan. 20, 1912	Septic Effluent Before Aeration
"	" " "	Aerating Tank
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent
"	" " "	Septic Effluent
"	Jan. 20, 1912	Contact Effluent
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	Feb. 8, 1912	Septic Effluent
"	" " "	Contact Effluent
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4

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SEWAGE AND EFFLUENTS.

EXPRESSED IN PARTS PER MILLION.

Turbidity.	Sediment.	SOLIDS. Total.	Fixed.	Volatile.	Total in Solution.	Fixed in Sol.	Vol. in Sol.	Total in Suspension.	Fixed in Susp.	Vol. in Susp.	Chlorine.	NITROGEN AS Total (Kjel).	Total (Kj.) in Sol.	Free Ammonia.
< 25														
25														
		98	54	43										
		80	47	33										

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RECORD OF ANALYSES OF

RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Millville	Dec. 14, 1911	Tidal Tank
"	" " "	Septic Effluent
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 3
"	Dec. 19, 1911	Septic Effluent
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Septic Effluent
"	" " "	Tidal Tank
"	Dec. 20, 1911	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Septic Effluent
"	" " "	Effluent—Bed No. 1
"	Dec. 22, 1911	Septic Effluent
"	" " "	Septic Effluent Before Aeration
"	" " "	Septic Effluent After Aeration
"	" " "	Contact Effluent—Bed No. 4..
"	" " "	Contact Effluent—Bed No. 4..
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 4
"	" " "	Contact Effluent—Bed No. 4..
"	Dec. 23, 1911	Raw Sewage
"	" " "	Septic Effluent
"	" " "	Septic Effluent
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 4
"	" " "	Septic Effluent Before Aeration
"	" " "	Septic Effluent After Aeration
"	" " "	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 3
"	Jan. 12, 1912	Septic Effluent
"	" " "	Contact Effluent
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	Jan. 20, 1912	Septic Effluent Before Aeration
"	" " "	Aerating Tank
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent
"	" " "	Septic Effluent
"	" " "	Contact Effluent
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	Feb. 8, 1912	Septic Effluent
"	" " "	Contact Effluent
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4

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SEWAGE AND EFFLUENTS.

EXPRESSED IN PARTS PER MILLION.

NITROGEN AS				OXYGEN CONSUMED (80 min. boiling.)		Oxygen Dissolved.	BACTERIA (per cc.)				Relative Stability (per cent.)
Organic (diff.)	Organic (diff.) in Sol.	Nitrites.	Nitrates.	Total.	In Solution.		At 20° C.	At 37° C.	Red Colonies at 37° C.	B. Coli.	
.....	.....	.....	.....	.....	.....	.....	16,100	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	452,500	.....	21,000	.....	....
.....	.....	.....	.....	.....	.....	.....	55,750	.....	4,100	.....	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
.....	.....	.....	.....	.....	.....	.....	1,050,000	.....	48,500	.....	....
.....	.....	.....	.....	.....	.....	.....	166,250	.....	5,100	.....	....
.....	.....	.....	.....	.....	.....	.....	415,000	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	0.00	.....	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	1.60	.....	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	1.00	.....	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	.....	162,450	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	41,000	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	.....	150,000	.....	4,500	1,000	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	.....	118,500	.....	1,075	1,000	....
.....	.....	.....	.....	.....	.....	.....	33,500	.....	1,300	.....	....
.....	.....	.....	.....	.....	.....	2.00	.....	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	5.10	.....	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	2.05	.....	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	88,000	.....	7,000	100	....
.....	.....	.....	.....	.....	.....	.....	55,000	.....	1,800	100	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
.....	.....	.....	.....	.....	.....	3.85	.....	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	5.20	.....	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	1.95	.....	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	.....	159,500	.....	12,000	10,000	....
.....	.....	.....	.....	.....	.....	.....	24,250	.....	1,000	100	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	10,750	.....	500	.....	....
.....	.....	.....	.....	.....	.....	.....	4,850	.....	425	100	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	94
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47

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RECORD OF ANALYSES OF
RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Millville	April 2, 1912	Tidal Tank
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	May 17, 1912	Septic Effluent
"	" " "	Contact Effluent
"	" " "	Contact Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	June 25, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	July 1, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 3
"	July 31, 1912	Septic Effluent
"	" " "	Effluent—Tidal Tank
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 2
"	Sept. 11, 1912	Final Effluent
"	Oct. 2, 1912	Effluent
"	" " "	Effluent
Moorestown	Dec. 11, 1911	Contact Effluent
"	" " "	Effluent
"	Feb. 6, 1912	Contact Effluent
"	Mar. 7, 1912	Effluent
"	April 5, 1912	Effluent
"	May 31, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 4
"	Sept. 9, 1912	Final Effluent
Morris Plains	Jan. 10, 1912	Effluent
"	April 1, 1912	Effluent—Sand Filter
"	July 5, 1912	Effluent—Sand Filter
"	Sept. 13, 1912	Final Effluent
Morristown	Jan. 10, 1912	Contact Effluent
"	" " "	Effluent—Sand Filter
"	Feb. 13, 1912	Effluent
"	" " "	Contact Effluent
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 2
"	" " "	Raw Sewage
"	" " "	Septic Effluent
"	" " "	Effluent—Bed No. 1
"	Feb. 15, 1912	Contact Effluent
"	" " "	Contact Effluent
"	" " "	Raw Sewage
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent
"	" " "	Effluent—Bed No. 1
"	" " "	Septic Effluent
"	April 1, 1912	Effluent

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SEWAGE AND EFFLUENTS.

EXPRESSED IN PARTS PER MILLION.

NITROGEN AS				OXYGEN CONSUMED (30 min. boiling.)			BACTERIA (per cc.)				
Organic (diff.)	Organic (diff.) in Sol.	Nitrites.	Nitrates.	Total.	In Solution.	Oxygen Dissolved.	At 20° C.	At 37° C.	Red Colonies at 37° C.	B. Coli.	Relative Stability (per cent.)
							107,700			21,000	
											15
											15
											15
											15
											20
							504,750	160,000	27,500	100	
							16,500	4,200	1,800	?.	
											38
											15
											10
											96+
											88
											68
											60
											15
											60
								57,000	11,000	10,000+	
							8,400	3,050		100+	
											15
											38
											10
											38
											50
											35
											96+
											95
											96+
											96+
											96+
											96+
											96+
											96+
											96+
											35
											35
						3.00					
						1.30					35
											40
						0.00					50
						0.50					52
						0.70					
											35
											20
						+90					20
						0.50					
											35
						1.30					
											35
						1.30					
						1.35					

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RECORD OF ANALYSES OF

RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Morristown	April 1, 1912	Septic Effluent
"	" " "	Effluent—Sand Filter No. 1
"	" " "	Effluent—Sand Filter No. 1
"	" " "	Contact Effluent
"	July 5, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	Sept. 13, 1912	Contact Effluent
"	" " "	Final Effluent—Sand Beds
New Lisbon	Feb. 29, 1912	Effluent—Clay Bed
" "	Sept. 10, 1912	Effluent—Sand Bed No. 1
Newton (Sparta St. Plant)	Feb. 28, 1912	Stream
" " "	" " "	Stream
" " "	" " "	Effluent—Bed No. 3
" " "	" " "	Effluent—Bed No. 2
" " "	" " "	Effluent—Bed No. 4
" " "	" " "	Effluent—Bed No. 5
" " "	" " "	Effluent—Bed No. 1
" " "	Sept. 19, 1912	Effluent—Sand Bed No. 2
" (Clinton St. Plant	" " "	Effluent—Sand Bed No. 2
Overbrook	Aug. 23, 1912	Effluent—Sand Filters
"	Sept. 26, 1912	Final Effluent
Plainfield	Jan. 15, 1912	Effluent—Bed No. 5
"	" "	Effluent—Bed No. 13
"	May 1, 1912	Contact Effluent
"	" " "	Effluent—Bed No. 13
Princeton	Jan. 2, 1912	Effluent—Sand Filter
"	" " "	Effluent—Irrigation Field
"	Feb. 9, 1912	Effluent—Sand Filters
"	" " "	Effluent—Irrigation Field
"	July 30, 1912	Effluent—Sand Bed
Rahway State Reformatory	Jan. 9, 1912	Septic Effluent
Red Bank	Feb. 20, 1912	Effluent—Tank No. 2
" "	" " "	Effluent—Septic Tank
Ridgewood	Dec. 28, 1911	Effluent—Bed No. 3
"	Jan. 25, 1912	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent
"	" " "	Raw Sewage
"	Feb. 3, 1912	Effluent
"	April 26, 1912	Contact Bed No. 1
"	Aug. 8, 1912	Contact Bed No. 1
Riverside	Jan. 17, 1912	Contact Effluent—Bed No. 2
"	" " "	Contact Effluent—Bed No. 3
"	" " "	Contact Effluent—Bed No. 4
"	" " "	Effluent—Sand Filter
"	April 8, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Sand Bed No. 4
"	May 21, 1912	Effluent—Sand Bed No. 1
"	" "	Effluent—Bed No. 1
"	July 11, 1912	Effluent—Sand Filter No. 1
"	Sept. 4, 1912	Effluent—Sand Beds
Roebling	Jan. 11, 1912	Effluent

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SEWAGE AND EFFLUENTS.

EXPRESSED IN PARTS PER MILLION.

Turbidity.	Sediment.	SOLIDS. Total.	Fixed.	Volatile.	Total in Solution.	Fixed in Sol.	Volatile in Sol.	Total in Suspension.	Fixed in Susp.	Volatile in Susp.	Chlorine.	NITROGEN AS Total (Kjel).	Total (Kj.) in Sol.	Free Ammonia.
85	10	275	178	97	274	177	97	1	0	0	50	ppt	19	18
175	80	959	201	758	341	189	152	618	12	606	35	22	22	19

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RECORD OF ANALYSES OF
RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Morristown	April 1, 1912	Septic Effluent
"	" " "	Effluent—Sand Filter No. 1
"	" " "	Effluent—Sand Filter No. 1
"	" " "	Contact Effluent
"	July 5, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 4
"	Sept. 13, 1912	Contact Effluent
"	" " "	Final Effluent—Sand Beds
New Lisbon	Feb. 29, 1912	Effluent—Clay Bed
" "	Sept. 10, 1912	Effluent—Sand Bed No. 1
Newton (Sparta St. Plant)	Feb. 28, 1912	Stream
" " "	" " "	Stream
" " "	" " "	Effluent—Bed No. 3
" " "	" " "	Effluent—Bed No. 2
" " "	" " "	Effluent—Bed No. 4
" " "	" " "	Effluent—Bed No. 5
" " "	" " "	Effluent—Bed No. 1
" " "	Sept. 19, 1912	Effluent—Sand Bed No. 2
" (Clinton St. Plant)	" " "	Effluent—Sand Bed No. 2
Overbrook	Aug. 23, 1912	Effluent—Sand Filters
"	Sept. 26, 1912	Final Effluent
Plainfield	Jan. 15, 1912	Effluent—Bed No. 5
"	" " "	Effluent—Bed No. 13
"	May 1, 1912	Contact Effluent
"	" " "	Effluent—Bed No. 13
Princeton	Jan. 2, 1912	Effluent—Sand Filter
"	" " "	Effluent—Irrigation Field
"	Feb. 9, 1912	Effluent—Sand Filters
"	" " "	Effluent—Irrigation Field
"	July 30, 1912	Effluent—Sand Bed
Rahway State Reformatory	Jan. 9, 1912	Septic Effluent
Red Bank	Feb. 20, 1912	Effluent—Tank No. 2
" "	" " "	Effluent—Septic Tank
Ridgewood	Dec. 28, 1912	Effluent—Bed No. 3
"	Jan. 25, 1912	Effluent—Bed No. 4
"	" " "	Effluent—Bed No. 3
"	" " "	Effluent—Bed No. 2
"	" " "	Effluent—Bed No. 1
"	" " "	Effluent
"	" " "	Raw Sewage
"	Feb. 3, 1912	Effluent
"	April 26, 1912	Contact Bed No. 1
"	Aug. 8, 1912	Contact Bed No. 1
Riverside	Jan. 17, 1912	Contact Effluent—Bed No. 2
"	" " "	Contact Effluent—Bed No. 3
"	" " "	Contact Effluent—Bed No. 4
"	" " "	Effluent—Sand Filter
"	April 8, 1912	Effluent—Bed No. 1
"	" " "	Effluent—Sand Bed No. 4
"	May 31, 1912	Effluent—Sand Bed No. 1
"	" " "	Effluent—Bed No. 1
"	July 11, 1912	Effluent—Sand Filter No. 1
"	Sept. 4, 1912	Effluent—Sand Beds
Roebling	Jan. 11, 1912	Effluent

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SEWAGE AND EFFLUENTS.

EXPRESSED IN PARTS PER MILLION.

NITROGEN AS				OXYGEN CONSUMED (30 min. boiling.)			BACTERIA (per cc.)				
Organic (diff.)	Organic (diff.) in Sol.	Nitrites.	Nitrates.	Total.	In Solution.	Oxygen Dissolved.	At 20° C.	At 37° C.	Red Colonies at 37° C.	B. Coli.	Relative Stability (per cent.)
.....	.....	.....	.....	.....	.....	2.0	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	0.2	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	3.0	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	1	.05	.20	33	30	3.0	.....	.....	.....	.....	15
3	3	.05	.30	78	64	2.3	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96+
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75

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RECORD OF ANALYSES OF
RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Roebling	Jan. 11, 1912	Effluent—Sand Bed
"	April 25, 1912	Sand Effluent
"	" " "	Sand Effluent
"	June 27, 1912	Sand Filter Effluent
"	Sept. 3, 1912	Contact Effluent
"	Sept. 4, 1912	Effluent—Sand Bed
Smith's Landing	July 23, 1912	Raw Sewage
" "	" " "	Disinfecting Chamber
Trenton (DeLaval Stm. Tur. Co.).	Nov. 29, 1911	Effluent—Cinder Filter
"	Aug. 2, 1912	Effluent—Stone Bed
Ventnor (Little Rock)	July 23, 1912	Raw Sewage
"	" " "	Disinfecting Tank
Verona	Dec. 8, 1911	Effluent—Ditch
"	April 23, 1912	Effluent—Field
"	" " "	Effluent—Field
"	" " "	Brook Water
"	" " "	Brook
Vineland	Feb. 19, 1912	Effluent—Sand Filter
"	" " "	Disinfection Tank
"	Sept. 11, 1912	Effluent—Sand Bed
Washington	Feb. 16, 1912	Effluent—Sand Filter
"	" " "	Shabbecong Creek
"	April 29, 1912	Effluent—Sand Beds
"	Aug. 16, 1912	Effluent—Sand Bed No. 4
"	Sept. 18, 1912	Final Effluent
Westfield	Jan. 5, 1912	Effluent—Beds Nos. 1, 2, 3
"	" " "	Effluent—Bed No. 5
"	" " "	Effluent—Bed No. 6
"	Mar. 13, 1912	Effluent—Bed No. 6
"	" " "	Effluent—Beds Nos. 3 and 5
"	" " "	Effluent—Beds Nos. 1 and 2
"	" " "	Raw Sewage
"	May 6, 1912	Effluent—Filter No. 3
"	" " "	Effluent
"	" " "	Brook
Woodstown	Nov. 21, 1911	Effluent—Sand Filter
"	Mar. 27, 1912	Effluent—Sand Filter
"	" " "	Effluent Sand Filter
"	Sept. 10, 1912	Effluent—Gravel Beds
Woodstown, Supplee Alderney Creamery	Mar. 27, 1911	
"	April 25, 1912	
"	" " "	
Wortendyke	April 26, 1912	Effluent—Sand Beds
"	Sept. 27, 1912	Brook

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SEWAGE AND EFFLUENTS.

EXPRESSED IN PARTS PER MILLION.

Turbidity.	Sediment.	SOLIDS.										Chlorine.	NITROGEN AS		
		Total.	Fixed.	Volatile.	Total in Solution.	Fixed in Sol.	Volatile in Sol.	Total in Suspension.	Fixed in Susp.	Volatile in Susp.			Total (Kjel).	Total (Kj.) in Sol.	Free Ammonia.

RECORD OF ANALYSES OF
RESULTS OF CHEMICAL ANALYSES

TOWN.	DATE.	CHARACTER OF SAMPLE.
Roebling	Jan. 11, 1912	Effluent—Sand Bed
"	April 25, 1912	Sand Effluent
"	" " "	Sand Effluent
"	June 27, 1912	Sand Filter Effluent
"	Sept. 3, 1912	Contact Effluent
"	Sept. 4, 1912	Effluent—Sand Bed
Smith's Landing	July 23, 1912	Raw Sewage
" "	" " "	Disinfecting Chamber
Trenton (DeLaval Stm. Tur. Co.)	Nov. 29, 1911	Effluent—Cinder Filter
"	Aug. 2, 1912	Effluent—Stone Bed
Ventnor (Little Rock Ave.)	July 23, 1912	Raw Sewage
"	" "	Disinfecting Tank
Verona	Dec. 8, 1911	Effluent—Ditch
"	April 23, 1912	Effluent—Field
"	" " "	Effluent—Field
"	" " "	Brook Water
"	" " "	Brook
Vineland	Feb. 19, 1912	Effluent—Sand Filter
"	" " "	Disinfection Tank
"	Sept. 11, 1912	Effluent—Sand Bed
Washington	Feb. 16, 1912	Effluent—Sand Filter
"	" " "	Shabbecong Creek
"	April 29, 1912	Effluent—Sand Beds
"	Aug. 16, 1912	Effluent—Sand Bed No. 4
"	Sept. 18, 1912	Final Effluent
Westfield	Jan. 5, 1912	Effluent—Beds Nos. 1, 2, 3
"	" " "	Effluent—Bed No. 5
"	" " "	Effluent—Bed No. 6
"	Mar. 13, 1912	Effluent—Bed No. 6
"	" " "	Effluent—Beds Nos. 3 and 5
"	" " "	Effluent—Beds Nos. 1 and 2
"	" " "	Raw Sewage
"	May 6, 1912	Effluent—Filter No. 3
"	" " "	Effluent
"	" " "	Brook
Woodstown	Nov. 21, 1911	Effluent—Sand Filter
"	Mar. 27, 1912	Effluent—Sand Filter
"	" " "	Effluent—Sand Filter
"	Sept. 10, 1912	Effluent—Gravel Beds
Woodstown, Supplee Alderney Creamery	Mar. 27, 1911	
"	April 25, 1912	
"	" " "	
Wortendyke	April 26, 1912	Effluent—Sand Beds
"	Sept. 27, 1912	Brook

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SEWAGE AND EFFLUENTS.

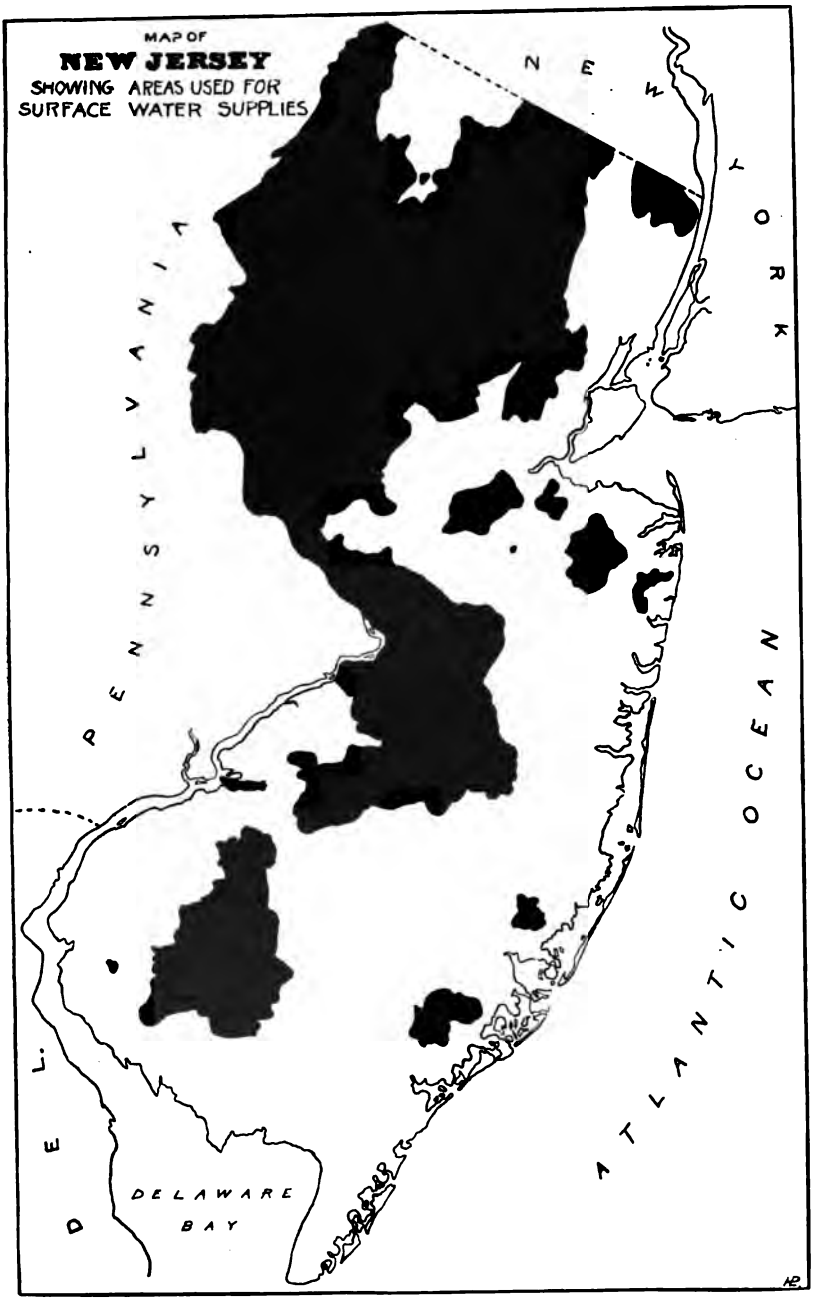
EXPRESSED IN PARTS PER MILLION.

NITROGEN AS				OXYGEN CONSUMED (30 min. boiling.)			BACTERIA (per cc.)				
Organic (diff.)	Organic (diff.) in Sol.	Nitrites.	Nitrates.	Total.	In Solution.	Oxygen Dissolved.	At 20° C.	At 37° C.	Red Colonies at 37° C.	B. Coli.	Relative Stability (per cent.)
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96 +
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96 +
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	81
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96 +
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
.....	.....	.....	.....	.....	.....	.....	265,000	680,000	.....	10,000 +	....
.....	.....	.....	.....	.....	.....	.....	315,000	2,400	1,000	1,000 +	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
.....	.....	.....	.....	.....	.....	.....	410,000	152,000	.....	10,000 +	....
.....	.....	.....	.....	.....	.....	.....	420,000	49,000	.....	1,000 +	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96 +
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96 +
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	2,300	.....	< 100	< 100	20
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96 +
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96 +
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96 +
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96 +
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	96 +
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
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MAP OF NEW JERSEY

Showing Areas Used for Surface Water Supplies.

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Water Supplies.

BY H. P. LETTON, C. E., FIELD ASSISTANT.

Mr. F. E. Daniels, Chief, Division of Sewerage and Water Supplies, Board of Health of the State of New Jersey, Trenton, New Jersey:

DEAR SIR—Herewith is my report on the condition of the public water supplies of the State during the year ending October 31, 1912.

This report consists of a general summary of the situation, a discussion of the filtration plants, calcium hypochlorite plants, surface supplies and ground supplies. Following these are descriptions of four filter plants which were not described in the last annual report.

A record of all the work done and of all actions by the Board pertaining to water supplies will be found under the towns which are arranged in alphabetical order.

The work in connection with the supervision of the water supplies has been much improved during the past year, and following will be found a brief discussion of the main points:

A card index has been made in which each town or community, having a public water supply, has a card either describing the plant or referring to the town in which the plant is located. Different colored cards signify the different sources of supply as ground, surface and treated. Another file lists the water companies, giving the different communities supplied by each. A third file describes the sources of the various bottled waters and the method of handling them.

A complete set of topographical maps issued by the State Geological Survey has been obtained and on these have been drawn the outlines of the watersheds, the drainage from which is used as a source of water supply. In connection with these, several sets of the U. S. G. S. topographical maps are kept and these are used in the field and in connection with reports on various projects. These

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records and maps have proved to be of great value in that they give at a glance all our available information in regard to a supply.

Another important factor in the work was the passage of the following law which is self-explanatory:

CHAPTER 317.

A Further Supplement to an act entitled "An act to secure the purity of the public supplies of the potable waters in this State," approved March seventeenth, eighteen hundred and ninety-nine.

BE IT ENACTED BY THE SENATE AND GENERAL ASSEMBLY OF THE STATE OF NEW JERSEY:

Changes in operation of furnishing potable water.

1. Whenever any person or corporation furnishing water for potable purposes finds it necessary, for any reason whatever, to make any change, temporary or permanent, in the operation of their plant, or in the manner of furnishing such water, which may in any way, either temporarily or permanently, tend to deteriorate the potable quality of the water so furnished, by pumping directly into reservoirs or supply mains untreated water, when the ordinary supply is subjected usually to some form of purification treatment, or by any other similar or dissimilar change in said supply, the tendency of which is to cause polluted waters to be forced into distributing pipes, the said person or corporation, before making such change, or, in case of emergency, requiring the immediate making of changes in the operation of the plant, or in the manner of furnishing such water, within six hours after making such change, shall notify the local board of health, and shall also notify by telegraph or telephone, the State Board of Health, as to the character and estimated duration of such change.

Board of health notified.

Penalty.

2. Every person or corporation violating any of the provisions of this act, either by corporate action or the unauthorized act of an employe, shall be subject to a penalty of one hundred dollars, to be recovered in an action of debt by the local board of health, or, if there be no local board of health, then at the suit of the State Board of Health

Right of action not lost.

3. Nothing herein contained shall operate to relieve such person or corporation from any suit or action on behalf of any person aggrieved by the action of such person or corporation in making any such change as is referred to in paragraph one of this act.

Repealer.

4. All acts and parts of acts inconsistent herewith are hereby repealed, and this act shall take effect immediately.

Approved April 1, 1912.

Since this went into effect a number of valves have been sealed and it is planned to seal all those on the lines through which raw or polluted water could enter a distribution system.

There are at the present time 202 water companies, either municipal or private, supplying water to 353 communities having a total population in 1910 of 2,108,265 or 83% of the whole population of the State. The following table gives some statistics as to the kinds of water supplied, etc.:

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Kind of Supply.	Communities Supplied.	Population.	% of Each Kind.	Private Companies.	Municipal Companies.
Ground	179	364,169	17.3	98	30
Surface	29	424,852	20.2	19	9
Treated	129	1,115,716	52.9	17	16
Ground and Surface	14	129,509	6.1	8	4
Ground and Surface Treated	2	74,019	3.5	1	..
Total	353	2,108,265	100.0	143	59

Following will be found discussions of the conditions of the various types of supplies.

WATER FILTRATION PLANTS.

There are 32 filter plants in the State of which 12 filter for iron removal from ground waters and 20 for removal of color, turbidity and bacteria from surface waters. The location of the plants and types are given in the following tabulation:

TABULATION OF FILTER PLANTS.

FILTER FOR IRON.			FILTER FOR POLLUTION.		
Sand Filter.	RAPID SAND FILTERS.		Sand Filter.	RAPID SAND FILTERS.	
	Gravity.	Pressure.		Gravity.	Pressure.
Matawan Rumson	Gloucester Hightstown Keyport Pennsgrove Smithville	Allenhurst Asbury Park Atlantic Highlands Merchantville Millville	Haledon Lambertville	Allentown Bridgeton Burlington Little Falls Long Branch Millville Moorestown Mt. Holly New Milford Roebling Skillman S. Plainfield	Glen Gardner Neptune Twp. West End Rahway Rahway-Middlesex Raritan

Twenty-five of these plants were described in the 1911 report, and a description of the remainder will be found farther on in this report.

Considerable time has been spent during the past year in attempting to improve the quality of water produced by the various filter plants. Complete tests were made at Moorestown, Mount Holly, Skillman, Millville, Gloucester and Rahway. The tests will be found described farther on in the report. In every case recom-

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mendations made as a result of these tests, when carried out, have benefited the quality of the water. Tests of several more plants are planned for the near future.

A rapid sand filter plant requires careful and scientific attention in order to give efficient results. The ideal plan is to have a chemist and bacteriologist in charge of the filters who will make frequent tests of all the factors affecting the results and thus be able to regulate these factors so as to produce the best water. Unfortunately, all but two of the plants in this State, those at Little Falls and New Milford, are unable for economic reasons to have such supervision. The man in charge is usually a stationary engineer, who, while he may be thoroughly conversant with the duties of that position, has no idea of the principles underlying the process of rapid sand filtration. It is to be hoped that the time will soon come when several plants situated near each other will combine forces and employ a chemist and bacteriologist to give their filters scientific supervision.

Another difficulty, and one of about equal importance to that above, is that many of the plants lack the necessary equipment for efficient results. This is due to the fact that the filter plant was put in as cheaply as possible with no advice as to its adaptability to the case involved, except that of the filter company anxious to sell its product. As a result of this practice we have plants with no coagulation basin, or a basin very much undersize. The chemical feed apparatus is usually very crude, it being a very common occurrence to find no constant head device, the flow being regulated by means of a globe valve on the side of the mixing tank. In many cases the weight of chemical itself is guessed at. Loss of head gauges and effluent controllers are very rarely found, with the result that after washing the rate of filtration is sometimes twice the normal rate.

At two plants it was found that the sulphate of alumina was being put into an acid water, with the result that there was no coagulation and that the delivered water was highly corrosive.

In order to keep a closer check on the work of the filter plants, samples of the raw and filtered water have been collected each month since July from all the plants treating a polluted water.

A gratifying feature of the work has been the ready co-operation of the authorities in control of the plants. With but few exceptions an attempt has been made to comply with the recommendations

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made as a result of our inspections. The private companies have been better in this respect than the municipalities.

As a whole, the condition of the filtration plants is much better than ever before and from indications at the present time, they will all be giving much more efficient results within a year from now.

CALCIUM HYPOCHLORITE PLANTS.

It is quite generally advocated at the present time that a calcium hypochlorite plant should be part of the equipment of every water filtration plant treating a polluted water. With this policy in mind their installation has been encouraged and during the year ten new plants have been constructed, making a total of 20 in the State.

The installations which operate in connection with filters are the municipal plants at Gloucester, Burlington and Rahway, the State plant at Skillman and the private plants of the Mt. Holly Water Co., Moorestown Water Co., Montclair Water Co., Millville Water Co., Middlesex Water Co., Hackensack Water Co., and John A. Roebling's Sons Company.

Those treating an unfiltered surface water are the municipal plants at Jersey City, Trenton, New Brunswick and Woodbury, and the private plants of the Elizabethtown Water Company and The Lehigh Water Company.

Those treating a ground water are the municipal plants of Dover and Bridgeton, and the private plant of the Bergen Water Co.

As a rule, these plants have given very good results, but as they require close attention and as this is sometimes lacking, they cannot be depended upon as a substitute for filtration or other purification processes.

It is hoped that within a short time the remaining filtration plants will be equipped with the treatment.

An emergency portable hypochlorite plant has been constructed along the lines proposed by the Minnesota State Board of Health and this is kept in readiness to be shipped immediately to any point in the State should the necessity arise.

SURFACE SUPPLIES.

Considerable attention has been paid to the untreated surface supplies during the past year. The watersheds of all the supplies

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have been inspected by the inspectors, and in several cases complete examinations have been made by members of the technical staff. This latter is true in regard to the supplies of Atlantic City, Dover, Frenchtown, Medford, Mendham, Morristown, Newark, Orange, Pleasantville and Rockaway.

It would be well if this State had a law similar to those of Massachusetts and New York giving the State Board of Health the power to make rules for the protection of each watershed which would be particularly applicable to that shed.

There is now a statute giving the State Board of Health the power to order railroads crossing a watershed to close their toilets on trains within the shed. This rule has been applied to the Newark and the Atlantic City cases.

There are a number of surface supplies which are furnishing a water of a poor quality and in 11 cases the authorities have been ordered to take steps toward installing a purification process.

GROUND SUPPLIES.

The plants supplying ground water, there being more of this kind than any other, have required very little attention during the past year.

A few plants have shown B. coli and on investigation the source of this has, in most cases, been located and abated. A peculiar feature of this has been the occurrence at irregular intervals of B. coli in the water of deep wells along the coast. In several cases of this kind no possible source of pollution could be discovered and after a time the B. coli disappeared.

In several cases where B. coli was found present in a new well investigation showed that the well had been washed down with a polluted surface water. In one case the water used was highly polluted with sewage and except for the accidental visit of our representative the well would have been put in use without sufficient pumping to remove the pollution.

As a whole, the ground supplies are in very good condition, furnishing water of a high degree of purity and requiring but little supervision from this office.

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DESCRIPTIONS OF FILTRATION PLANTS.

Following will be found descriptions of several of the filtration plants which were not described in the 1911 report. Twenty-three plants were described in the above report, between pages 355 and 366.

HALEDON.—This is a sand filter owned by the Borough of Haledon. The supply is derived from Oldham Brook Reservoir and flows by gravity to the filters. There is in reality only one filter, the sand bed of which is divided into two sections, each 12 feet 3 inches by 50 feet. The underdrain system consists of a line of 8 inch vitrified pipe, laid with open joints down the center of each bed. Over the underdrains and bottom of filter is placed 10 inches of gravel and over this 20 inches of sand, having an effective size of 0.32 m. m. and a uniformity coefficient of 2.3.

From the filters the water passes through rate controllers into the clear water basin. This is a covered concrete basin, 50 feet by 25 feet by 10 feet. and having a storage capacity of about 95,000 gallons.

Tubes for showing the loss of head are placed in the regulator house.

To clean the filter the water on the surface is drawn off with the exception of about a foot, and the bed is then swept with heavy brooms. This stirs up the organic matter on the surface and this is then drawn off. Gutters are provided at the ends of the beds to carry off the water. After sweeping, water is run on the surface from the pond until fairly clear. It is necessary to clean the bed about once a week during the summer and about once in two weeks during the winter.

The average daily consumption is about 350,000 gallons and the plant is being operated at the rate of about 4,000,000 gallons per acre per day.

LAMBERTVILLE.—The Lambertville Water Company has a sand filtration system, which was one of the first to be constructed in the United States.

The plant consists of two filters, each 53 feet by 95 feet in plan, with earthen banks paved with rubble stone. The underdrain system consists of a number of lines of 4 inch vitrified pipe, which lead into a 12 inch line along one side of the filter. Over the underdrains were placed about 18 inches of broken stone and gravel, and over this about 18 inches of sand. This sand was taken from a bank along the Delaware River. A head of water of about 3 feet is maintained over the sand. From the underdrains the water enters a masonry well, from which it flows into the distribution system. In this well are two floats which operate butterfly valves placed in the supply pipes to the filters. When there is a draft from the town the water in the well lowers, which opens the valves and allows water to enter the filters. This method of operation causes the rate of filtration to vary with the consumption.

It has been necessary to scrape the beds on an average once every three weeks, and in the process of washing and restoring the sand, much of it has been lost so that at the present time there is only from 8 to 12 inches of sand above the gravel. This will account in part for the poor efficiency of the filter, as shown by analyses. The dirty sand is washed by means of a flume similar to that used in placer mining.

The Company is taking steps towards improving the filter by adding more sand and building a clear water well.

MATAWAN.—This is an iron removal plant owned by the Borough of Matawan. The supply is derived from 3 wells, 5 inches in diameter and 200 feet deep. From the wells the water is pumped through a 6 inch ver-

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tical pipe, over the edge of which it falls into a receiving basin, and is thoroughly aërated.

From the receiving basin the water enters the filters. These are two in number, each being 22.5 feet by 35 feet in plan, and containing from 3 to 4 feet of sand, having an effective size of 0.29 m. m. and a uniformity coefficient of 1.44. The filters are operated at the rate of six million gallons per acre per day; scraped about once a month, an inch of sand being removed each time.

From the filters the water flows to a clear well, 20 feet in diameter and having a capacity of 47,000 gallons.

The results obtained from the plant are very good, practically all the iron being removed.

RUMSON.—This is an iron removal plant owned by the Rumson Improvement Company and located near Red Bank.

The supply is obtained from five driven wells about 300 feet deep. The water is pumped from the wells to an aerating device. This consists of a vertical pipe having a cap in the end full of ¼ inch holes. The water leaves the pipe with a high velocity and is broken up by a screen arrangement above and falls into a receiving basin about 6 feet square.

From the receiving basin the water enters the filters. There are two of these, each 23 feet by 35 feet in plan and containing 3.5 feet of beach sand. The sand has an effective size of 0.27 m. m. and a uniformity coefficient of 1.48.

From the filters the water flows to a clear well 18 feet in diameter and having a capacity of 17,000 gallons.

The average daily consumption during the summer is about 160,000 gallons and during the winter 60,000 gallons.

The beds are scraped every 3 or 4 days in summer and every 10 to 12 days in winter.

Very good results are obtained from the plant. the iron being practically all removed.

WORK DONE AND ACTIONS TAKEN IN REGARD TO THE PUBLIC WATER SUPPLIES.

ALLENHURST.—In a letter dated May 15, 1912, this Division was requested by the Borough of Allenhurst to send a representative to Allenhurst to go over their water supply system, in an attempt to locate the source of the pollution which was shown in a sample collected May 9, 1912. In response to this request Mr. Palmer visited Allenhurst June 4, 1912, and made a complete report in detail.

Recommendations were made and transmitted to the Borough but none of these recommendations had been put into effect up to the first of October, 1912.

ALLENTOWN.—This is a municipal filtration plant and was described on page 355 of the 1911 Annual Report.

Analyses of this supply have shown the water to be unsatisfactory and inspections have also revealed conditions that would account for this. Early in the year it was found that no alum was being added. Even with the addition of alum and soda ash there is no opportunity for settlement before this water passes on to the filters. The town does not control the watershed and there is ample opportunity for pollution.

On September 17, 1912, the Board ordered that the Allentown authorities be notified to install a coagulation basin.

There has been a movement on foot to investigate the possibility of deriving a water supply from springs up stream, but nothing definite was ever accomplished.

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ASBURY PARK ESTATES.—On August 22, 1911, permission to supply water to the residents of Asbury Park Estates by Mr. Edward Gottheimer was refused. This supply was described on page 345 of the 1911 Annual Report.

In September, 1912, it came to the notice of this Department that no attention had been given to the above order. A reinspection showed no apparent improvement and on October 1, 1912, it was ordered that Mr. Gottheimer be notified "not to furnish any water for public use until the requirements of this Board, relative to the water plant, have been complied with."

ATLANTIC CITY.—The water supply of Atlantic City is derived from driven wells, ranging from 100 to 200 feet in depth, and from Absecon Creek. The wells furnish about 25 per cent. of the supply. The wells are located at the pumping station in Absecon.

The Absecon Creek watershed is about 18 square miles in area. It is located in a somewhat low-lying region, covered for the most part with small growths of natural woodland.

The city owns about 60 per cent. of the watershed. The remaining land is owned by private parties and there is an effort on foot to develop this land in some sections for small farms and residences. At present, however, the population is very small and the dwellings are widely scattered.

The shed is crossed by several highways and by two railroads. The highway most travelled is that running from Atlantic City to Egg Harbor City. This road lies parallel to the tracks of the West Jersey and Seashore Railroad, and both highway and railroad cross tributaries of the North Branch of Absecon Creek at five different points. There are numerous small roadways on the watershed, but these are little travelled and are but little more than wagon paths through the woods.

From an inspection tour over this watershed it would appear that opportunities for dangerous pollution of the stream are not great. The most evident dangers are the railroads and the main highway crossings. As the traffic on the two railroads is so great during the summer season, human excrement should not be permitted to drop on the road bed while the trains are crossing the watershed. To be sure, the trains do not cross open culverts, but material deposited on the road bed can be washed into the stream, over the land.

At the request of the Board of Water Commissioners of Atlantic City, the State Board of Health requested the Philadelphia & Reading and the Pennsylvania Railroads to close the toilets and urinals on trains crossing the watershed.

During July, August and September samples of water were collected from different points on the watershed. The colon bacillus was found present in nearly every instance in 10. and 1.0 c. c. quantities, and occasionally in 0.1 of a c. c. This work has been verified in subsequent collections and in view of the character of the watershed, an explanation is difficult. It has been suggested that the colon bacilli may grow in number when placed in a shallow, slow running stream, exposed to high summer temperatures. The result is, indeed, unusual and may possibly be accounted for in this manner. It is planned to make further collections at similar points during the winter months.

Cases of this kind demonstrate the necessity of securing all the facts and not depending on analytical results alone in interpreting the character of a water supply.

BAYHEAD.—Inspections were made February 20, 1912, and August 5, 1912, in an attempt to locate the source of the B. coli which occurs at times in the water furnished by the Bayhead Artesian Water Company.

"The supply is obtained from three wells 700-800 feet in depth. The water rises to a height of about five feet above the surface of the ground

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and flows into a covered concrete basin, from which it is pumped into an elevated storage tank and the distribution system."

The investigation in February failed to reveal any source of pollution, as the water rises from the wells under pressure and is stored at an elevation above the surface of the ground. During the summer B. coli was absent, but in August it was again present. The inspection disclosed that some new piping had been placed just previous to the collection of the sample and it is possible that this was the source of the pollution.

BERNARDSVILLE.—In 1909 the Bernards Water Company was given permission to use temporarily the waters of Osborne's Pond for a public supply. In 1910 permission was given to use this supply permanently upon the construction of a filtration plant. Early in 1912, it was found that the Company had constructed a concrete basin, 40 feet by 72 feet by 9 feet, into which the pond water flowed by gravity, through gravel strainers, with no appreciable change. In June, 1912, the local Board of Health of Bernards Township was notified that the water was not of good quality for potable purposes. On August 31, 1912, it was ordered that the Bernards Water Company be notified to install an efficient filtration system and to submit plans for same before beginning construction.

BLACKWOOD.—On February 7, 1912, an inspection was made of the water supply system of the Blackwood Water Company. The report of this inspection outlined several methods by which the supply could be made safe for potable uses. The water is not supposed to be used for drinking but there is opportunity for it to be so used.

BOUND BROOK.—Because of objectionable features in the Bound Brook water supply, the following letter was sent by the Secretary of the Board to the Bound Brook Water Company on October 26th:

"At a meeting of the Board of Health of the State of New Jersey, held October 24, 1911, report was made as to the unsatisfactory quality of the water furnished by your Company to consumers in Bound Brook and vicinity. Motion was, therefore, made and carried that a communication be sent to you, notifying you that action must be taken to improve the quality of the water furnished to consumers by your Company."

This supply is taken from Middle Brook and from 18 drilled wells which vary in depth from 125 feet to 150 feet. The former is a gravity supply and nearly all of the water comes from this source. The wells are used when the surface supply is low or muddy. The well water has a high mineral content.

Analyses of the tap water frequently show the colon bacillus to be indicated in 1.0 cubic centimeter quantities, although inspections of the watershed have failed to reveal direct pollutions from habitations.

Numerous complaints have come to the Division against the extremely muddy condition of the water on frequent occasions. The Company has endeavored to avoid this by using well water at times of rain. Apparently, however, it is very difficult to shift the sources so as to avoid muddy water in the mains, and under the existing arrangement the consumers must suffer when mistakes occur.

An inspection of the shed was made on August 13th, and a complete report was made showing in detail the many sources of pollution. These were from pastures and habitations and are of such an extent and character as to be beyond the control of both Water Company and State authorities at times. The only remedy for this and the muddy water at times of rain is proper and adequate purification of the surface supply.

On October 18, 1912, we were notified that the Water Company had engaged an engineer to prepare plans for treating the water.

BRIDGETON.—Plans for a water filtration plant for the City of Bridgeton were approved in 1911, and during the past year the construction has been

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carried on. The plant was practically completed about the first of October, but on testing the coagulation basin the wall broke and as a result the plant will not be put into operation for some time yet.

BUTLER.—The attention of the Butler Water Company was called to a poor analysis of their water supply on June 15th. An inspector was sent to get information concerning the sources of the water and he reported that water was ordinarily obtained from Stone House Brook. A reservoir, formed by draining the brook, is located in the Thorne mountains about two miles from Butler.

From a 50 million gallon storage reservoir the water flows to a 9 million gallon distributing reservoir and thence gravitates to the town. It was learned from officers of the Water Company that when the reservoirs are cleaned, water is taken from the driven well supply of a local rubber company. On further investigation, however, it was found that the rubber company did not turn its well water into the city mains, but rather tapped on to a flume receiving surface water. This water was found to come from the Pequannock River.

Shortly after our first warning the Water Company retained a sanitary engineer to make a thorough investigation of the matter. He, very properly, issued instructions against using any water unless taken from a source whose condition was known to be satisfactory.

An inspection of Stone House Brook was completed on July 28th and several pollutions of the stream were found, although the population on the watershed is very small.

Alterations have been made upon the properties where pollutions existed. and upon reinspection these have been found abated.

CLAYTON.—In response to a complaint as to the quality of the water furnished by the Clayton-Glassboro Water Company an inspection of the system was made. The water is derived from driven wells and is of a good quality with the exception that it contains a small amount of iron. It developed that the complainant was receiving water from a "dead end," and as a result this water had a flat, unpleasant taste.

COLLINGSWOOD.—On March 12, 1912, plans for a municipal water plant for Collingswood were approved. These plans contemplated the filtration of well water for iron removal.

The plant was not constructed, however.

CRANBURY.—At the request of the Cranbury Water Company, a representative of this Division visited Cranbury on February 14th and 16th to determine the cause of excessive iron in the water. Cranbury has a population of about 800 and about 15,000 gallons of water are used daily.

An inquiry brought out the fact that while iron trouble has been observed by about 30 per cent. of the residents, yet the trouble has occurred all over the town and has not been confined to any one section. Analyses have shown iron in the tap water and in water direct from the well.

The Company was advised to lay the matter before one of the numerous companies that build plants for the treatment of such waters.

CROSSWICKS.—The supply of the Crosswicks Water Company was inspected August 3, 1912, in an attempt to locate the source of the B. coli which was shown by analyses to be present in the water.

The supply is derived from springs located along Doctor's Creek. According to the plans the water was to be collected in open joint terra cotta pipe, around which was to be placed broken stone and this in turn covered with earth. As actually constructed the pipe was omitted and the ditch either filled with broken stone, or the water allowed to flow over the surface, and then into the line of pipe leading to the suction well. By means of earthen dikes most surface water is kept out but some can enter.

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It was recommended that the work be reconstructed in accordance with the approved plans, and this recommendation was carried out by the Company

DOVER.—On April 23, 1912, an inspection of the municipal water supply at Dover showed that the supply is obtained from two distinct sources, supplying high and low service districts respectively.

The average daily consumption during 1911 was about 130,000 gallons.

Of the above amount, about 22,000 gallons is furnished by five driven wells, 6 inches in diameter and 200 feet deep. The water is pumped by a gasoline engine-driven triplex pump to the high service reservoir. At times some water is pumped to the low service system also.

The main part of the supply is derived from fifteen springs. These springs are enclosed in stone and cement basins. From some of the springs, open joint collecting drains lead off for collecting more water. The water from the springs is carried by cast iron pipe lines to a basin, from which it flows to the low pressure system. A brook which leads down the valley has been dammed, forming a small pond. In times of shortage from the springs, water from the pond is run through a so-called filter, which I was informed consisted of stone and charcoal, into two reservoirs having a capacity of about 3,600,000 gallons. From these reservoirs the water enters the low pressure system. A flowing well, 6 inches by 100 feet, near the catch basin discharges into it. This furnishes about ten gallons per minute.

As the springs were so situated that manure from cattle on the watershed could enter them, recommendations for improvement were made to the Water Commissioners. Numerous samples have been taken from the different springs during the past year and B. coli has been indicated frequently. In accordance with these recommendations, the springs have been better protected and a small hypochlorite plant has been installed and put into active use.

DUNELLEN.—An inspection of the water supply system of the Watchung Water Company of Dunellen, January 25, 1912, disclosed the fact that there was a possibility of pollution of their dug well near Green Brook, which is the stream receiving the effluent from the Plainfield sewage disposal plant.

On August 12, 1912, the Watchung Water Company requested the State Board of Health to take such steps as would prevent the pollution of Green Brook by the Plainfield sewage disposal plant.

This water supply is derived from six driven wells about 95 feet deep and from one dug well 12 feet in diameter and 20 feet deep.

The average daily consumption at the present time is about 500,000 gallons, and of this amount about 300,000 gallons is furnished by the dug well.

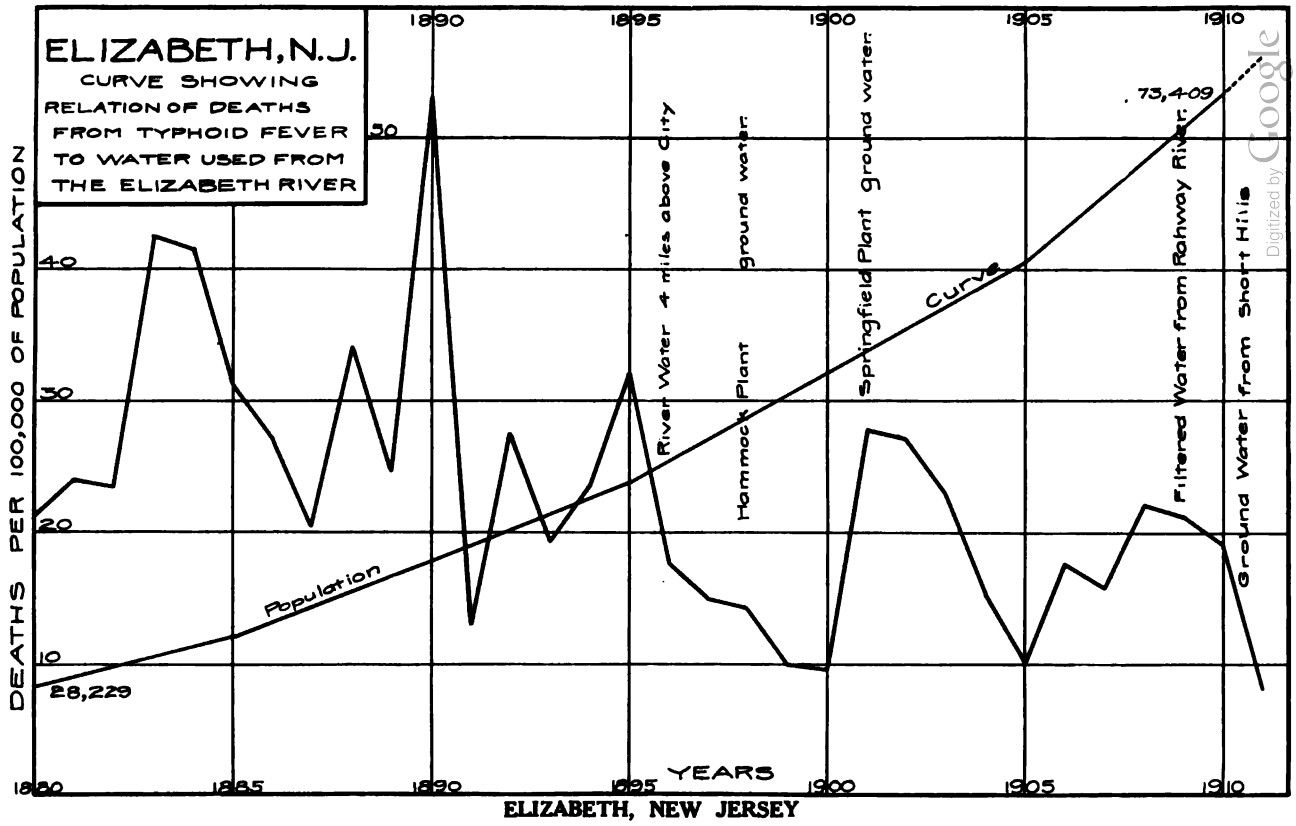
As it was necessary for the supply to be increased, the Company proposed to drive a number of wells about 25 feet deep along the creek.

With the stream highly polluted with sewage there would be a danger of pollution of these wells, as the well water is drawn from a cracked and stratified shale. In case a new sewage disposal plant, which is contemplated, is built above the site of this plant, it would probably be necessary either to abandon the wells or to use some means of sterilization in order to guard effectively against pollution. In case the disposal plant is so built, the effluent might be carried below the water plant.

As the effluent from the present Plainfield sewage disposal plant entered the stream, the City of Plainfield was ordered to improve immediately the condition of the plant, and it was suggested that the effluent be carried below the site of the pumping station.

ELIZABETH.—The water supplied by the Elizabethtown Water Company having shown B. coli for several years, a complete investigation was made on May 14, 1912, and a part of the report of this inspection follows:

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Curve Showing Relation of Deaths from Typhoid Fever to Water Used from the Elizabeth River.

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"The supply is derived from five different sources, three of which are ground waters, and two surface supplies, one of which is filtered. The Hummock plant supplies three million gallons per day from sixty driven wells. The Springfield plant furnishes a maximum of five and one-half million gallons per day from sixty driven wells. From the Short Hills Water Company one million gallons of water per day is obtained. From the Middlesex Water Company's plant at Rahway five million gallons per day is obtained. The water from the above four sources is supplied to Elizabeth at a constant rate, and any deficiency is made up by water taken from the Elizabeth River, impounded in two reservoirs about half a mile above the centre of the city. On an average, two million gallons of water per day is derived from this source.

"The river is impounded in a basin, known as the Ursino reservoir, having a capacity of from twenty-five million to thirty million gallons. From this reservoir a twenty-four inch pipe line leads a few hundred yards to the Irvington Avenue reservoir, which has a capacity of about twenty-five million gallons. From this reservoir the water is carried through a pipe line to the pumping station near the centre of the city. In times of high turbidity in the river water, the line leading from the Ursino reservoir to the Irvington Avenue reservoir is closed, thus preventing any high turbidity in the delivered water. These two reservoirs are a part of the original supply of Elizabeth.

"Inasmuch as the Elizabeth River flows through a thickly settled country, and is beyond any doubt considerably polluted, it should not be used as a potable water supply without some form of treatment. There is a large storage, which is sufficient to remove most of the turbidity. For this reason it would seem that if the water were suitably treated with calcium hypochlorite it would be satisfactory."

A chart, drawn up in connection with the above report, indicates that the Elizabeth River has affected the typhoid fever death rate in Elizabeth (see chart). Up to the year 1898 only water from the river was used, and since that time a mixture of ground water, filtered water and river water has been used. A small amount of river water has always been used, this amount increasing after the establishment of each new pumping station, as the population grew, being again decreased upon the addition of a new source. This chart shows the close relation between the typhoid fever death rate and the amount of water used from the Elizabeth River.

The Elizabethtown Water Company, accordingly, was ordered to install immediately a hypochlorite plant for the treatment of the water taken from the Elizabeth River.

On June 25, 1912, plans for a hypochlorite plant were approved. This plant has been constructed and has been in operation since the latter part of September.

ESSEX FELLS.—The supply of this town is taken from driven wells. Most of the draft is on a 110 foot well just across the road from the pumping station. This well has a brick lined reservoir at the top 20 feet deep and about 8 feet in diameter. The driven well casing is open just above the bottom of the dug well section and while the pump is shut down the natural flow of water is such as to fill the brick reservoir. Water is raised from this well by means of a suction pump. The casings of the other wells extend up above the ground surface and the water is raised by air pressure.

In May of this year, analyses of tap samples of this supply differed materially from previous analyses and a representative of this Division was sent there to investigate the cause.

All water was being drawn from the suction well at this time and the water level in the brick reservoir was down to the top of the open casing. A small

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brook runs within 20 feet of this well and it was plain that brook water was entering the reservoir through the brick side wall. Analyses showed that the suction well was responsible for the changed conditions in the tap water, higher chlorine and nitrates being found.

Upon further investigation, it was learned that a sewer line had overflowed into the brook about one-quarter of a mile above the well just at the time that the first poor analysis was obtained.

To remedy this condition, the suction well was pumped to waste for several days, the casing and suction pipe connected, the brick reservoir completely filled in with clay and clay-filled ditches placed between the brook and the well.

A sewer line runs down the road about 30 feet beyond the brook and the possibility of seepage from the sewer line was suggested. Later analyses have not borne out this supposition, and the pollution of the suction well was undoubtedly wholly caused by the polluted brook water.

FREEHOLD.—A sample of the water from the Freehold water supply having shown B. coli an inspection was made March 29, 1912.

The plant is located about one and one-half miles west of the town in a low, marshy valley.

The supply is obtained from 16 driven wells, of which 15 are 70 feet in depth and one 500 feet in depth. They are pumped by the air lift process, the water discharging into collecting pipes which are elevated on piles about 3 feet above the ground surface and are laid on a one per cent. grade. The collecting wells discharge into two open circular concrete basins built around two wells near the pumping station. These basins act as sand catchers. From here the water flows to a suction well from which it is pumped into the distribution system.

No source of pollution could be found, and samples taken from the two collecting basins show the absence of B. coli. The plant seems to be in good shape, with the exception that the walls of the sand catching basins should be raised high enough to prevent any polluting matter from entering.

FRENCHTOWN.—On October 8, 1912, an investigation was made of the supply of the Frenchtown Water Company.

The intake is located on Nishasakawick Creek near the city limits. The water is passed through a gravel strainer into a suction well, from which it is pumped into a storage reservoir upon a nearby hill.

The creek has its source about six miles northeast of Frenchtown and flows for the most part over a hard shale bottom through a county devoted largely to agriculture, although there is a considerable wooded portion. The main source of pollution is at the village of Everittstown. All along the brook through the town are located barns, barnyards and privies, although none of these are of such a type that they can be classed as pollutions under the law. Cattle are pastured in large numbers at numerous points throughout the watershed, and this is undoubtedly the source of a large amount of B. coli.

In accordance with the above report, the State Board of Health, on October 22, 1912, ordered that the Frenchtown Water Company be notified to install some form of treatment for purifying the water.

GLADSTONE.—On August 20, 1912, plans for a water supply system for the Bedminster Water Company were approved subject to the installation of some form of treatment for purifying the water. The source of the supply is a small brook fed largely by springs.

GLEN GARDNER.—In response to a request from the New Jersey Sanatorium for Tuberculous Diseases at Glen Gardner, an investigation was made of a stream which it is proposed to use for a new water supply.

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This inspection showed that the stream receives the drainage from numerous barnyards and cow pastures, and that it would be unfit for domestic use without some form of treatment.

On August 13, 1912, an inspection was made of the present supply of the institution. "The larger part of the supply is obtained from Rocky Run, although the water from a few springs is used. The creek water is pumped by steam pumps into a receiving basin. This basin is built of concrete and has a storage capacity of about 22,500 gallons. The springs flow into this basin by gravity. From the receiving basin the water is pumped by a motor-driven triplex pump into a storage reservoir above the institution. This reservoir is built of concrete, covered with a tile roof and has a capacity of about 166,000 gallons.

"From the storage reservoir the water flows by gravity to the distribution system. Before entering the system the water passes through a rapid sand filter of the pressure type. This filter is 60 inches in diameter and has a rated capacity of about 50,000 gallons per day. A shunt feed alum dosing device is in place, but this is not used at present. The filter is washed with raw water about once a week.

"As the daily consumption is a little over 50,000 gallons, and as this comes during only part of the 24 hours, it is evident that the filter is badly overworked. This is borne out by analyses which show no appreciable purification. A mistake was made in not putting this filter on the line leading to the reservoir, as in that case it would filter at a uniform rate and could be washed with filtered water."

It was learned that a complete power house was to be constructed some distance down the stream from the present pumping station. It is proposed to take the water from the creek some distance above the plant, to which it will be carried in a cast iron pipe, and from here pumped to the present storage reservoir.

"After giving the entire situation a careful study, I am convinced that the most feasible solution of the problem is as follows: A rapid sand gravity filtration plant should be constructed at the power house. This would necessitate the construction of a coagulation basin and chemical tanks, a filter and a clear water well. Since all the water is to be treated, it would only be necessary to go up the stream far enough to get the necessary fall. It would be well to construct a filter with sufficient area to give a day's supply in about eight hours. The installation of the above outlined plant would not be overly expensive and would be large enough to take care of the growth of the institution for many years. If properly designed and constructed, this would deliver a water of a very good quality.

"In case it is impossible to carry out this plan or some other similar one shortly, I believe that it would be well to install a plant and treat the water with calcium hypochlorite. The first thing the institution authorities should do is employ a competent engineer to study the situation and plan the filter and other appurtenances."

As a result of this report, an engineer was employed and on September 7, 1912, plans were presented to the State Board of Health for approval. These plans followed the recommendations given above and were approved October 22, 1912.

GLOUCESTER.—The filter plant at Gloucester was described on page 358 of the 1911 Annual Report.

An inspection made on January 26, 1912, revealed the fact that because of a consumption greater than could be taken care of by the filters it was the custom to allow the creek water to pass from the settling basin around the filters and directly into the filtered water basin. This condition was obviously

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improper. It was apparent that a great deal of the water was being wasted in the city and by cutting down the consumption the above arrangement would be unnecessary. There are driven wells at Gloucester, and an effort was made to use enough water from these so that the creek water could be abandoned. A hypochlorite plant was recommended in connection with the surface supply, however, in case it should be called into use. This apparatus was later set up under the direction of a representative of this Division. The outfit consisted of three 50 gallon barrels and one 10 gallon keg. The chemical is fed into the suction line as it enters the building, about 15 pounds being used per million gallons of water.

On March 12th our representative found that the bulk of the supply was being taken from eight of the artesian wells, but that the consumption still remained over 300 gallons per capita.

The strainer system was thoroughly cleaned out in April and new sand placed in the filters.

In an effort to reduce the water waste the clear water basin was drawn down and several large cracks were found and repaired.

On October 25th we were informed that all water was being taken from the wells. Analytical figures did not bear this out and upon investigation it was discovered that some raw creek water was being added to help out the supply. The State Board of Health was not notified of this change. Such steps as these are in violation of Chapter 317, Laws of 1912.

HADDONFIELD.—(Haddonfield Water Company). The supply is derived from springs, which are located along a wooded ravine. The springs are connected to a sub-surface collecting line with loosely laid tile pipe. The spring water enters a screen chamber near the reservoir or is allowed to flow into a suction well and thence pumped into the distribution system. The reservoir is about 150 by 300 feet in plan with a storage capacity of approximately two million gallons. The reservoir is protected by a dike from surface water flowing down the ravine.

Ordinarily samples of this supply show the absence of B. coli in 10.0 c. c. Owing to the indicated presence of the colon bacillus in 0.1 c. c. in a sample collected on May 24th an unusual condition was suspected. Another sample of this supply collected on May 31st gave a similar result. The Company was advised of the analytical results and a representative of the Division went to Haddonfield on June 5th to investigate.

"In the operation of this plant it is the custom to allow the spring water to enter the reservoir and then draw upon the reservoir line so as to induce a circulation through the reservoir. At times of rain, for fear that surface drainage will enter the spring lines, the spring water is wasted and the stored water in the reservoir used. When cleaning the reservoir, water is drawn directly from the spring line.

"It appears that a very severe rain storm occurred on May 24th and portions of the ravine were scoured out so as to expose sections of the tile lines. The spring water was by-passed during the storm, but from the testimony of Mr. Smith, the Superintendent of the Company, some of this storm water probably entered the tile line and the reservoir before the spring supply was cut off.

"The ravine is probably about an eighth of a mile in length. At the upper end it is crossed by the Marlton Pike and on the banks at this point there are a dwelling, a school house, a meeting house and hitching sheds. Back of the school house there are two surface privies within 50 feet of the ravine and near the dwelling there is a surface privy. All of this territory drains into the ravine, and at the time of the heavy storm on the 24th of May polluting matter from the ground in this vicinity undoubtedly found its way into the spring pipe line."

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The colon bacillus was indicated in 1.0 c. c. in samples taken on June 5th and on June 17th. A tap sample on July 8th showed B. coli absent.

To improve conditions the tile lines were all recovered with earth, and the school authorities promised to change the privies in accordance with suggestions made.

HAMPTON.—Hampton is supplied by the Junction Water Company, which derives its supply from springs and from Rocky Run Brook.

Rocky Run is the stream which was recently declared an unsatisfactory source of supply for the Glen Gardner Sanatorium, being heavily polluted with animal excreta and being liable to human pollution.

The average daily consumption is around 100,000 gallons, of which about 80,000 gallons is used by the Central Railroad of New Jersey and the remainder by the inhabitants of Hampton.

On June 25, 1912, the Board ordered that the attention of the Company be called to the unsatisfactory quality of the water and that they be notified that some method must be adopted to improve the quality of the same.

HIGH BRIDGE.—At the request of Dr. Trimmer of the Water Committee of the City Council of High Bridge, an inspection was made of the water supply system on October 10, 1912.

"The supply is derived from two distinct sources:—One of these, the original supply, is derived wholly from springs and is known as the McCatheron Reservoir. This is a small reservoir consisting merely of a depression formed by throwing up an earthen dam and acts solely as a catch basin inasmuch as its storage capacity is very small. The other source, which is the new one, was installed in 1911. The plans of the work are on file in this office. The supply is obtained from Willoughby Brook and embraces a watershed containing 700 acres. In this watershed are 9 residences, four being very near the brook. At two places the water from spring houses is allowed to flow over the ground through the farmyard into the brook, thus constituting a direct pollution.

"The water from each of the two sources is conveyed by cast iron pipe lines to a concrete storage reservoir near the city. This reservoir, which is known as the Fowler Reservoir, has a capacity of about 700,000 gallons.

"I was informed that about 1,000 people are supplied with the water, and I should judge, therefore, that the average daily consumption is in the neighborhood of 100,000 gallons."

As this watershed is fairly heavily populated, and as the water storage is so slight, some form of purification will have to be used here sooner or later.

HOLLY BEACH.—About the middle of February, 1912, it came to our notice that the Holly Beach, Wildwood and North Wildwood Water Company was furnishing water without having submitted plans, as required by law.

On March 15, 1912, a map was received, showing the location of the well and distribution system. On this same day an inspection was made and reported on in part as follows:

"The source of the water is a driven well, 356 feet deep, which was driven in 1899. It is owned by the Holly Beach Cold Storage Company, and is located in their building on Burke Avenue. The distribution system is owned by the Water Company. The well has a 6 inch casing and a four and a half inch suction pipe, which goes down 30 feet within the casing. The water level is said to fluctuate from the top of the well in winter to 14 feet beneath the ground surface in summer. A single action duplex Worthington steam pump is kept in operation at a slow rate 24 hours daily, pumping water directly to the mains. At the present time about 30 houses are supplied by this company.

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"The open top of the well casing is flush with the earth floor of the building on one side and but a few inches above the ground on the other. At the time of my visit it was raining hard, and the well casing was in a pool of water, and surface water was flowing into the well. This surface wash was coming from a roadway between the buildings. The situation of this well, even in times of dry weather, is such as to make it subject to pollution, for it is located in a populated district on a public street and on the edge of an alley-way."

This matter was taken up with the Company and an inspection made June 1, 1912, showed that the space between the casing and suction pipe had been filled with cement, but that this was not a proper protection to the well.

On June 4, 1912, it was ordered that the Company be notified to protect properly the water supply or that the case would be reported to the Attorney-General for action.

An inspection made on September 26, 1912, showed that the 3-inch suction pipe had been joined tightly to the casing. However, nothing had been done to prevent the waste water, that comes down the alley and from the pump, from forming a pool around the well. On this occasion the coupling at the top of the casing was entirely covered with water.

An inspection made on October 10, 1912, showed that the casing had been enclosed in a box of cement, but that water still stood around this in time of rain. It is proposed to make further changes in the drainage in order to protect properly the well from any chance of surface pollution. This supply still remains to be approved.

ISLAND HEIGHTS.—Island Heights is a summer resort, located on Barnegat Bay at the mouth of Toms River. The town has a summer population of about 3,000 while the winter population is only one-tenth this amount.

Water is obtained from wells and has a high content of iron and sulphur compounds which, at times, according to reports, make it very offensive. The iron is present in such quantities that it stains the porcelain lined fixtures, spots clothes in washing, and when used but infrequently deposits considerable sediment in the pipes. The reported odor is probably due to the sulphur compounds as is the cloudy appearance of the water. It is the custom of the Company during the summer months to aerate the water as it enters the elevated tank, and to flush the distribution system frequently.

During the winter months the consumers are very few and the circulation of water in the mains is practically negligible. A hydrant at the corner of Laurel and Ocean Avenue when opened discharged a water heavily charged with iron oxide, showing that it had settled out and required a large flow to move.

Apparently, the only way in which this water can be made absolutely satisfactory is by filtration. Until that comes, however, efficient flushing will do much to relieve conditions.

JERSEY CITY.—On August 3rd an inspection was made of the calcium hypochlorite plant of the Jersey City water-works at Boonton, New Jersey. This plant is one of the largest in the State, treating on an average of over 40,000,000 gallons per day.

Results of analyses of samples taken daily at the Boonton reservoir and at the Jersey City end of the pipe line, and analyzed by the Jersey City Water Department, show that the treatment is highly effective.

KEYPORT.—At the request of Mr. Anthony Bedle, Superintendent of the Keyport Water Department, an inspection was made August 30, 1912, in an endeavor to ascertain, if possible, the cause for the red water trouble which was quite prevalent in all parts of the town.

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MILLVILLE: Water Filters and Hypochlorite Plant.



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LAMBERTVILLE: State Emergency Hypochlorite Plant in Use.

Water when first drawn is perfectly clear, but upon being heated it quickly precipitates as a red sediment. This same water when placed in a glass bottle and allowed to stand for a few hours becomes cloudy and deposits a rusty sediment on the glass. Samples of the water were taken from two houses nearby and boiled but no perceptible change was noticed. From this fact it would appear that the trouble is due to house piping.

LAMBERTVILLE.—On July 8, 1912, an inspection was made of the filter plant of the Lambertville Water Company. This plant is fully described on page 369 of this report.

An inspection of the watershed, from which the supply is derived, showed it to be in fair condition, with the exception that numerous cattle were pastured within its confines.

The inspection of July 8th showed that the sand bed was much too thin, and accordingly the Company sent in several samples of sand which it proposed to use. These were analyzed and the results transmitted to the Company, together with recommendations as to the betterment of the supply.

In October, 1912, the Lambertville supply became so depleted that it was necessary to draw water from other sources. Accordingly, a pipe line was laid and a boiler and pump installed, so that canal water could be pumped into the street mains.

In compliance with Chapter 317, Laws of 1912, the Water Company notified both the local and State Board of Health of this step, but not before the canal water had been admitted to a small section of the city.

The emergency hypochlorite plant of the State Board of Health was shipped to Lambertville a few hours after receiving the word. Representatives of this Division were on hand to set this up when it arrived. It was then learned that there were two points of entrance for the canal or river water into the system. It seems that the emergency pumping plant could not be gotten ready in time so the river supply of a rubber mill had been turned into the mains, a check valve for fire protection being removed to accomplish this end. The river water, however, was confined to a small section of the city and the Water Company first sent out circulars, warning consumers of the change. Hypochlorite plants were set up hurriedly at both intakes but not before untreated water had entered the mains of the city.

Untreated river and canal water thus supplied a small section of the city for 78 hours, the whole city for 36 hours, and treated water was supplied to the whole city for 70 hours before rain fell sufficiently to help out the reservoir. The treated water was also used for several days after this period and the hypochlorite plant at the canal intake was allowed to remain in place for several weeks until the original surface supply again became able to supply the city fully.

LAUREL SPRINGS.—This supply is obtained from five wells 93 feet to 115 feet in depth. The wells are pumped directly from the casing, there being no suction pipe extending into the well. From the pumps the water enters the distribution system—being exposed at no place except possibly in the stand pipe.

The ground in which the wells are located is very marshy, the ground water table standing, during most of the year, above the tops of the wells.

LONG BRANCH.—An inspection of the Swimming River plant of the Tintern Manor Water Company, which plant was described on page 360 of the 1911 Report, was made in August, 1912.

This inspection showed that there was considerable leakage of raw water into the clear water basin from the valves on the inlet line to the filters. This was pointed out to the Superintendent of the Company and he promised to put a tight concrete floor over the entire clear water basin.

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It was noted that the deposit of slime on the filters was very heavy and that it took considerable time to wash the filters. It was suggested that the construction of a coagulation basin would probably be of great economical benefit to the Company, as it would save probably 50 per cent. of the water required for washing the filters. The Company proposes to install such a basin this winter.

LUMBERTON.—The water supplied by the Lumberton Light, Water and Sewerage Company having shown B. coli repeatedly in large quantities at all times, and as the watershed is subject constantly to pollution, the State Board of Health, on June 25, 1912, ordered that the authorities be notified of the unsatisfactory quality of the water and that some method must be adopted to improve the quality of the same.

MAHWAH.—On January 9, 1912, permission was granted to Mr. George M. Dunlop of Spring Valley, N. Y., to supply water for potable purposes to the inhabitants of Cragmere at Mahwah, New Jersey.

The supply is derived from a driven well 550 feet deep and 8 inches in diameter.

The average daily consumption is about 21,000 gallons.

On January 9, 1912, permission was granted to Mr. John Winter to supply water for potable purposes to the residents of Mahwah.

The supply is derived from a driven well, 84 feet in depth and 6 inches in diameter.

The average daily consumption is about 4,000 gallons.

MANTOLOKING.—On February 20, 1912, and August 5, 1912, inspections were made of the water supply system at Mantoloking, in an endeavor to locate the source of the B. coli which analyses showed present in the water.

"The supply is obtained from four driven wells, 3 inches in diameter and 900 feet in depth. The water rises above the surface of the ground and flows into a covered concrete reservoir, from which it is pumped into an elevated storage tank and the distributing system."

No source of pollution was found at either inspection.

MATAWAN.—This plant is described on page 369 of this report. Analyses of the water having shown B. coli absent in the raw water and present in the filtered water, an inspection was made June 1, 1912.

It is believed that the trouble was caused either by polluted water entering the filtered water basin through a broken valve or by dust blowing into the basin. It was recommended that the basin be made tight in order to keep out all foreign matter.

MEDFORD.—The water supplied by the Medford Water Company having shown B. coli in large numbers at all times, on June 25, 1912, it was ordered that the authorities be notified of the unsatisfactory quality of the water, and that some method must be adopted to improve the quality of the same.

On October 7, 1912, an inspection of a large part of the watershed was made by a representative of this department. This inspection showed that the supply is derived from a very sparsely inhabited, and for the most part heavily wooded territory. It was found that the only possibility of pollution was from cranberry pickers during the months of August, September and October, and it was recommended that a hypochlorite plant be installed for treating the water during those months.

MENDHAM.—The Mendham water supply having shown the presence of B. coli, an inspection was made on February 26, 1912. This inspection showed that the supply is a gravity one obtained from springs, the water of which is impounded in a reservoir located on a mountain north of the town. The springs are collected in open joint terra cotta pipes and the only possible source of pollution found was as follows:

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LITTLE SILVER: Water Filters.
Tintern Manor Water Company.



BOONTON: Hypochlorite House for Jersey City Supply.

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The end of one of the tile pipes stops just below a small bridge, and thus the water entering the pipe receives any drainage which may run off from the road and the bridge. It was recommended that this pipe be extended about 200 feet farther on, but nothing has been done in this matter to date.

MILLTOWN.—On July 9, 1912, plans for a water supply system for the Borough of Milltown were approved. The plan contemplates deriving ground water from infiltration wells. Construction has not as yet been started.

MILLVILLE.—The analyses of the water furnished by the Millville Water Company having shown that very inefficient results were being obtained from the filter plant, a complete study of this plant was made during January, 1912. As a result of this study the following recommendations were made:

First.—That arrangements be made for dosing the raw water with soda ash in the proportion of about ¾ of a grain per gallon, and sulphate of alumina in the proportion of about one grain per gallon.

Second.—That a hypochlorite plant be constructed.

Third.—That a pump be installed, or other arrangements be made, so that the water can all be filtered regardless of the elevation of the water in the lake.

The above recommendations were partially carried out, and on May 20th, 1912, another test was made. This test showed that the recommendations in regard to the soda ash and the hypochlorite had been carried out, although the quantities of chemicals added were very much too small. As a result of this test the following recommendations were made.

First.—Use not less than one grain per gallon of sulphate of alumina and not less than .67 grain per gallon of soda ash.

Second.—Put calibrated orifice boxes on outlets from solution tanks.

Third.—Construct new coagulation basin with from two to six hours' storage.

Fourth.—Add at least 10 inches of sand to each filter.

Fifth.—Remodel the hypochlorite plant.

Sixth.—Add additional pumping capacity so that the filters can at all times be effectively washed.

The above recommendations were transmitted to the Water Company on May 24, 1912. An inspection on August 16, 1912, showed that the recommendations pertaining to the addition of sand to the filters was the only one that had been carried out.

On August 27, 1912, it was ordered that the company remodel their hypochlorite plant, and that they send to the Board a plan of all the piping in and around the pumping station. Nothing has been done in regard to this order as yet.

MOORESTOWN.—The Moorestown Water Company having requested an inspection of their filter plant, on December 8 and 9, 1911, a representative visited the plant and made a report on same. This report showed that very inefficient results were being obtained from the filters. It was found that soda ash and alum were being added in the wrong order, and in far too small amounts. It was also found that the filters were being washed with raw water. As a result of recommendations made in regard to the chemicals and the method of washing the filters very much better results were obtained.

Samples of the water taken during July having shown B. coli, an investigation was made on Augnst 6th, and at this time it was discovered that the pollution was undoubtedly due to a break in a dike, which allowed a large amount of surface water to enter the reservoir, the water of which was used for washing the filters.

Typhoid fever having become epidemic in Moorestown about the middle of August, 1912, it was deemed advisable to put the water supply beyond sus-

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picion. To this end hypochlorite treatment was advised, and a temporary outfit was installed. This gave very good results but has since been replaced with a permanent plant, consisting of two cypress solution tanks and an orifice box for admitting the chemical into the suction pipe of the raw water pump.

MORRIS PLAINS STATE HOSPITAL.—Inspections were made of the water supply of the New Jersey State Hospital at Morris Plains on April 18, 1912, and July 23, 1912. These inspections showed that conditions had been much improved since the last inspection and report.

On account of the water showing B. coli on so many occasions it was decided to furnish bottled water for drinking to all employees and patients at the hospital. A large spring on the institution grounds has been enclosed in a concrete well and as the water flows from this it is bottled in five gallon demijohns and hauled to the buildings. About 150 bottles are used each day. It is planned at some later time to pipe the water from the spring to the buildings and bottle it there.

MORRISTOWN.—The proprietors of the Morris Aqueduct Company having requested an investigation of their supply on May 17, 1912, a representative visited Morristown and went over the entire system.

The supply in normal times is derived from surface water and springs located in five different drainage areas adjacent to one another. These watersheds have a total area of 955 acres, of which about 271 acres are owned by the company. The average daily consumption is about 630,000 gallons.

The system is divided into three districts. The high service, intermediate service and low service, the latter two being supplied by gravity, while the first is supplied by water pumped to a small storage reservoir.

In times of normal consumption enough water can be obtained from the above sources for meeting the demand, but on account of the dry summers for the past few years the supply ran low and it was found necessary to obtain an auxiliary supply. This supply consists of eight driven wells, located near Littleton. About 300,000 gallons per day can be obtained from this plant. The entire system is very well protected and there seems to be no chance of pollution entering the same.

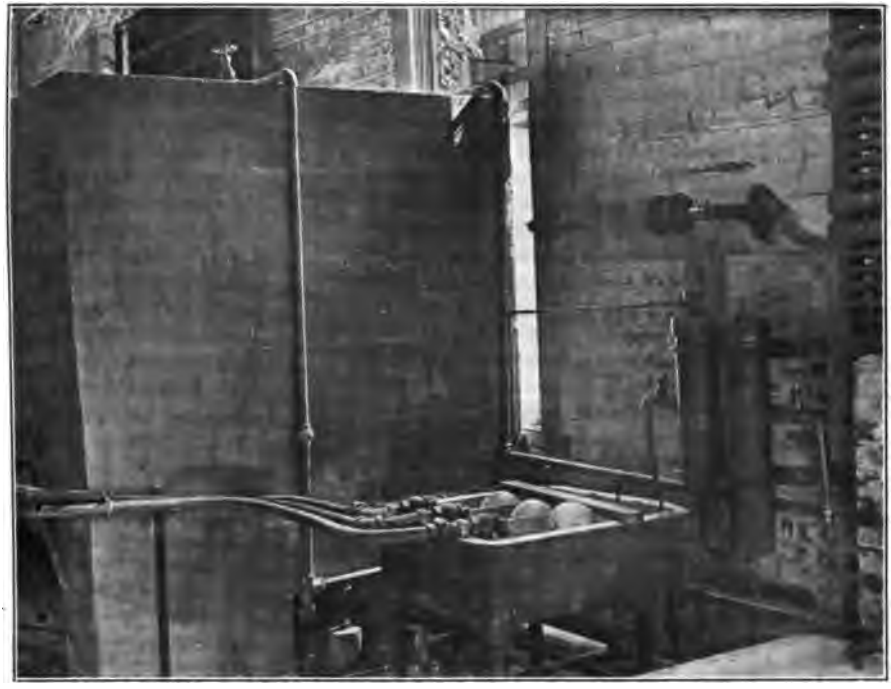
MOUNT HOLLY.—Early in February, 1912, typhoid fever became epidemic in Mount Holly, and it was deemed advisable to make a thorough test of the filter plant of the Mount Holly Water Company. This was done on February 9th and 10th, and it was found that the raw water had such a low alkalinity that no appreciable coagulation was obtained upon the addition of sulphate of alumina. It was recommended that soda ash be added to the water in the proportion of one grain per gallon. It was also advised that a hypochlorite plant be installed, that orifice boxes be placed on the outflow from the solution tanks, and that rate controllers be placed on the effluent pipes of the filters.

The recommendations in regard to the addition of soda ash, the hypochlorite plant and the calibrated orifice float boxes were immediately carried out by the company, with the result that much more efficient results were obtained.

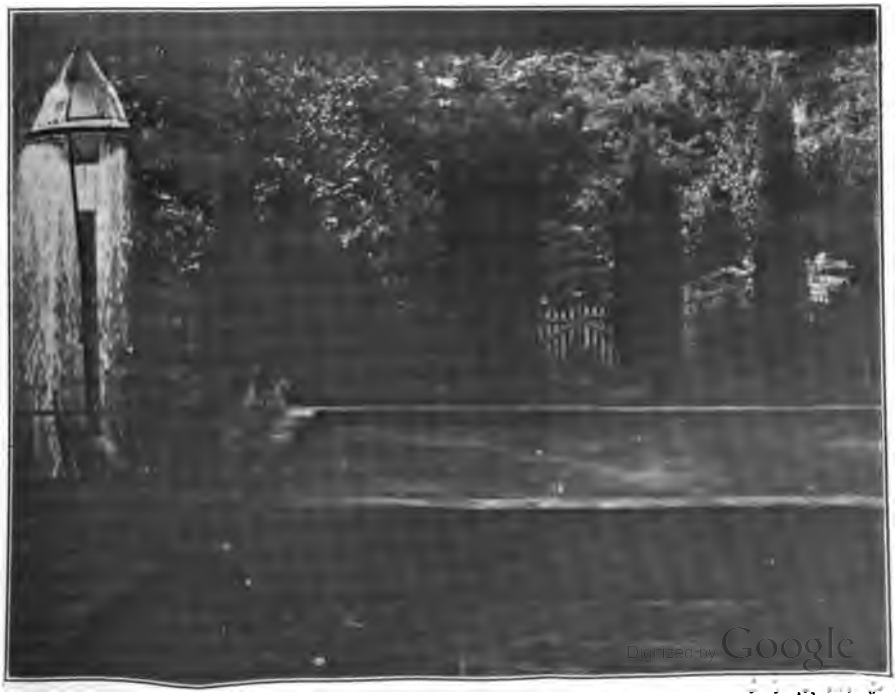
Samples taken during August, 1912, having shown B. coli at times, the company decided to improve further their plant, and on August 20, 1912, the plans of the improvements were approved.

Rate controllers and loss of head gauges have been installed on the filters, new solution tanks of concrete have been constructed, and a Venturi meter placed in the raw water line to regulate automatically the amount of chemicals added. These improvements should greatly aid in the production of a satisfactory water.

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MOUNT HOLLY: Water Works—Automatic Control Apparatus.



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RUMSON: Aeration Device and Iron Removal Filters.

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MULLICA HILL.—On June 11, 1912, an inspection was made of the water supply system of the Harrison Heights Improvement Company at Mullica Hill, in an attempt to locate the source of the B. coli which analyses showed to be present in the water.

The supply is obtained from two driven wells and on investigation it was found that the joint between the suction pipe and the well casing was made of cement, and that on account of the vibration from the pump this joint had cracked, allowing surface water to enter the well. Tightly caulked lead joints were made and since this was done no B. coli has been in evidence in the water.

NEWARK.—On July 9th the following report was submitted:

"On June 10th, a sample of water was collected from the Newark supply, and on June 14th the analysis was completed. This analysis showed B. coli to be present in one-tenth of a cubic centimeter, and as this was an exceptionally high number for this supply, we immediately wrote the Newark Water Department advising them of the situation. On June 17th we received a letter from Mr. Morris Sherrerd, of the Newark Water Department, stating that samples collected by the city health department on June 12th showed the same heavy pollution, and that he had been notified of the result of these analyses on June 15th. It was seen from the samples collected by the city health department that the B. coli pollution was located in the Cedar Grove reservoir, since the water entering this reservoir showed only a small number of B. coli, while the water in the reservoir showed it in very large numbers. As soon as Mr. Sherrerd learned of this he immediately ordered the Cedar Grove reservoir cut off from the city, and by-passed the water from the watershed directly into the distribution system. The blow-off valves on the Cedar Grove reservoir were also opened at this time, allowing the water to flow out, so as to expose the banks, in order that an inspection might be made as to the source of the pollution.

"On July 5th I visited Newark and was taken to the Cedar Grove reservoir by Mr. Sherrerd's assistant. The reservoir, which has a capacity of several hundred million gallons, is located beyond the mountain above Montclair. On the east side of the reservoir there is only one house, and this has not been occupied for eighteen months, according to the statements of the reservoir attendants. On the west side of the reservoir are a number of dwellings, half of which are owned by the City of Newark and in which the reservoir attendants live. The sewage from most of these houses is gathered into cesspools, located from 200 feet to 400 feet distant from the shore of the reservoir. Soon after the blow-off valves on the reservoir were opened these cesspools were heavily dosed with dye in order to ascertain, if possible, if there was any connection between them and the water in the reservoir. This dosing was continued for over a week, and a careful watch was kept in order to locate the dye in case it showed itself. I carefully inspected the various cesspools, and, in so far as I could ascertain, it seems that it would be impossible for any matter to enter the reservoir from them.

"Samples were collected as follows: The water entering from the watershed, and three samples along the length of the reservoir. The water entering showed B. coli to be present in one cubic centimeter, while two of the other samples showed B. coli absent, and in the other it was present in one cubic centimeter.

"I am at a loss to understand in what manner this water could have become polluted, inasmuch as the cesspools seem to be out of the question and that the road which circles the reservoir has deep gutters which prevent any surface wash from entering. It may be that the material reduction in the B. coli content in the reservoir is due to the natural death rate of the bacteria, inasmuch as the reservoir had been cut off for about three weeks at the time I took the samples.

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"I believe that this water is in a satisfactory condition at the present time for use, and I also believe that this reservoir is very well protected from any chance of pollution.

"It is proposed by Mr. Sherrerd that they will dose the reservoir with calcium hypochlorite by sprinkling it over the entire surface of the water, and it is also proposed to install a hypochlorite plant, which can be used in case of emergency hereafter. The city has purchased the Montclair Fresh Air and Convalescent Home which has been the greatest potential danger to the supply."

The above report having shown that the Cedar Grove reservoir had possibly been polluted by water coming from the watershed it was deemed advisable to make a careful inspection of this. The examination was reported on in part as follows:

"The supply is a surface one located on the headwaters of the Pequannock River, the watershed embracing parts of Morris, Passaic and Sussex Counties.

The intake is located about two miles below the station of Charlotteburg on the N. Y. S. & W. R. R. From here a 48 inch and a 42 inch steel pipe runs to the City of Newark, a distance of 21 miles.

The area of the watershed is 62.5 square miles. This is divided into four main subdivisions as shown on the accompanying map.

The Oak Ridge Reservoir, supplemented by the Canistear Reservoir stores the drainage from the entire upper portion of the main river. The area above the Canistear dam is 5.6 square miles, and above the Oak Ridge dam is 27.3 square miles. Canistear Reservoir has an area of 350 acres and a storage capacity of 2,500 million gallons. The elevation of the flow line is 1,086 feet. Oak Ridge Reservoir has an area of 383 acres, and a storage capacity of 2,555 million gallons. The elevation of the flow line is 836 feet. The water from Canistear Reservoir flows through a natural channel about five miles to Oak Ridge Reservoir.

The Clinton Reservoir stores the entire drainage from one of the main branches of the Pequannock. The area above the dam is 9.4 square miles. The reservoir has an area of 423 acres and a storage capacity of 3,518 million gallons. The elevation of the flow line is 992 feet.

Echo Lake is a natural body of water which stores the drainage from a small branch of the river. The area above the dam is 4.6 square miles. The lake has an area of 300 acres, and a storage capacity of 600 million gallons. The elevation of the flow line is 893 feet.

Below the Oak Ridge, Clinton and Echo Lake Reservoirs the water flows through natural channels to the intake. Here is located the Macopin Reservoir, having an area of 12.1 acres and a storage capacity of 32 million gallons. The elevation of the flow line is 585 feet. The area of the watershed above this dam, and below the other reservoirs, is 21.2 square miles.

The total storage capacity in the watershed is about 9,200 million gallons, which is sufficient to supply the demand for seven months without any rainfall.

Practically the whole watershed is a rough mountainous country, heavily wooded and sparsely inhabited. The total population in the watershed is about 900 and of this number about 800 are below the dam of the Oak Ridge, Clinton and Echo Lake reservoirs. The danger from pollution above these reservoirs is very slight, as the houses are scattered and are all some distance from the reservoirs or their tributaries. Also the storage period in each reservoir is a large factor of safety.

The larger portion of the inhabitants are located in the villages of Oak Ridge, Newfoundland and Charlotteburg along the river between Oak Ridge Reservoir and Macopin Intake. A careful inspection has just been completed by two inspectors of this Division of all the territory below the storage

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reservoirs. This inspection showed that most of the dwellings are located some distance from the stream, and that about 90% have privies with vaults, from which no visible pollution can be seen. The remaining 10% have cesspools with laterals forming a ground seepage system. None of the cesspools seemed to have overflows, and the nearest lateral was 200 feet away from a water course.

The City of Newark is buying all property on the watershed, which is offered at a reasonable price. The following table shows the purchases for the past five years:

YEAR.	HOUSES.	ACRES.
1907	3	1033
1908	14	1432
1909	24	4821
1910	32	2534
1911	25	1817
Total,	98	11637

The total land purchased to date is 19,469 acres, of which 1,468 acres are flooded, 19,469 acres are equivalent to 30.4 square miles, or 48.7 per cent. of the whole watershed. If the purchases are continued at the same rate as during the past five years, the city will own the entire watershed in about nine years. It is probable, however, that this result will be accomplished in less than nine years, as each property purchased by the city makes the neighborhood less desirable for a home, and thus more land will be offered each year. All of the land bordering on the reservoirs has been purchased and the city is now buying whatever is offered regardless of location in the watershed.

As soon as a property is purchased the buildings are removed and the land, if improved, allowed to return to its natural state. The open land is being reforested, about 120,000 trees, mostly white ash, spruce and pine being planted in 1910.

All the properties owned by the city are posted at frequent intervals with trespass notices. Boating and bathing are prohibited, but no effort is made to prevent fishing. In order to do this properly a corps of uniformed watershed police would be needed, and the city has not as yet deemed them necessary.

At the present time the employees of the city and their families reside within the watershed, but a village is being built below the Macopin Intake, and within a short time practically all of them will be moved there. The houses in which they now live will then be demolished.

The New York, Susquehanna and Western Division of the Erie Railroad has about ten miles of road in the watershed, the greater portion of the way being very close to the river. On July 5th, 1910, the State Board of Health, at the request of the City of Newark, ordered the railroad company to close the toilets on all trains between the stations of Butler and Beaver Lake. This eliminates what would otherwise be a very dangerous source of pollution.

After leaving the Macopin Intake the water flows through the steel conduits to the Cedar Grove Reservoir. This reservoir is located northwest of Montclair and is used as a reserve supply for the city in case of accident to the pipe line, or turbid water in the watershed. The reservoir has an area of 100 acres, and a storage capacity of 679 million gallons, which is about 17 days' supply. The elevation of the flow line is 405 feet. No water enters this reservoir, except through the pipe lines, as a road leads around the shore and this is so banked that all surface water is carried below the dams.

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In the city are located three distributing reservoirs with a combined capacity of 39 million gallons.

The total storage on the whole system is 9,923 million gallons, or about eight months' supply.

Regular microscopic examinations are made of the water in the different reservoirs, and in case any troublesome organism is found in large quantities, the reservoir containing it is cut off and treated with copper sulphate.

Bacteriological tests are made at frequent intervals by the Newark City Board of Health of water from all the reservoirs. It is probable that before long a bacteriologist will be employed by the Water Department to make daily tests.

The water as a whole is very well protected from pollution, but I am of the opinion that the following recommendations should be adopted in order to protect the supply:

First.—Employ a bacteriologist to make daily tests of the water.

Second.—Put a number of mounted uniformed police in the watershed to prevent trespassing on the city property and to note any pollutions.

On August 3, 1912, the City of Newark was advised to carry out the above recommendations.

On September 10, 1912, the City of Newark reported that the law did not allow the second recommendation to be adopted, but that the first would be carried out.

NEW BRUNSWICK.—On January 11, 1912, a communication was received from the Advisory Water Commission of New Brunswick, asking the State Board of Health to make rules to protect the water supply of said city, and making complaint of alleged pollutions at Milltown.

On January 25th and 26th a complete inspection was made at Milltown and a large number of minor pollutions were found.

On February 2, 1912, a conference was held with the Advisory Water Commission, and the situation discussed.

On March 19, 1912, the Advisory Water Commission appeared before the Board and discussed the situation.

On March 24, 1912, it was ordered that the Advisory Water Commission be notified that a reinspection of conditions at Milltown showed that practically all the pollutions there had been abated.

NEW LISBON.—The water supplied by the Burlington County Institutions at New Lisbon having shown B. coli in large numbers at all times, on June 25, 1912, it was ordered that the authorities be notified of the unsatisfactory quality of the water, and that some method must be adopted to improve the quality of the same.

On October 29, 1912, plans were received of a proposed filtration plant for the Burlington County Institutions.

NEW MILFORD.—On September 26, 1912, an inspection was made of the plant of the Hackensack Water Company at New Milford. At this time data were obtained in regard to the chemical and bacteriological tests made at the plant since its construction in 1905.

OCEAN CITY.—A sample of the water supplied by the Ocean City Water Company, having showed the presence of B. coli, it was requested by the company that a representative be sent to look over the situation. On July 17th an inspection was made and samples taken from the various wells comprising the supply. B. coli was found absent in all these samples.

OCEAN GATE.—Samples from this supply in 1911 showed the water to be of a poor quality, due to high iron content, and accordingly the system was remodeled and reported on June 4, 1912, in part as follows:

"The supply is obtained from one driven well 376 feet deep and 8 inches and 6 inches in diameter. The water flows naturally about two gallons per minute at a height of about one foot above the surface.

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"From the well the water is pumped to an elevated wooden tank holding about 20,000 gallons from which it enters the distributing system. The average daily consumption is between 5,000 and 10,000 gallons."

Samples of the water showed it to be relatively high in iron, but otherwise satisfactory, and on July 30, 1912, the plans were approved subject to some form of treatment to remove the iron, should it become objectionable.

ORANGE.—Analyses of the water supplied by the City of Orange having shown the presence of B. coli in large numbers, an inspection of the supply was made on April 1, 1912.

The supply is derived from surface flow and from springs, draining an area of about 4.8 square miles. On the watershed is a population of between 300 and 400 persons, most of whom are in the White Cloud district.

The fact that the water contained B. coli is not necessarily an indication of dangerous pollution, for the reason that the drainage from a number of farms, and from fields on which manure has been spread, and from many roads enters the reservoir. Samples of this supply taken since November, 1908, show the following B. coli:

Absent	6 times
In 10.0 c. c.	15 times
In 1.0 c. c.	7 times
In 0.1 c. c.	8 times

B. coli has not been absent in samples taken since February, 1911, and for this reason it would be impossible to detect any dangerous pollution in case it should enter the supply.

On October 1st, 1912, it was ordered that the Mayor and Council be notified that examinations of their water supply showed the presence of B. coli.

PEMBERTON.—The water supplied by the Pemberton Township Water, Sewerage and Light Company having shown B. coli in large numbers at all times, on June 25, 1912, it was ordered that the authorities be notified of the unsatisfactory quality of the water and that some method must be adopted to improve the quality of the same.

Nothing definite has been done as yet to carry out the above order.

PENNINGTON.—Samples of the water supplied by the Pennington Spring Water Company having shown the presence of B. coli, an inspection was made of the system on April 26, 1912. This inspection showed that the supply is derived ordinarily from springs, located on the side of a hill about two miles northwest of the town. The only source of pollution found was water entering the reservoir from a surface stream which receives the drainage from one or two cultivated fields. It was recommended that the pipe, through which this water flows, be removed.

In dry years the springs do not furnish a sufficient quantity of water and two wells have been drilled near the spring collecting reservoir. These are pumped by the air lift process, the water being allowed to flow by gravity to the town.

PERTH AMBOY.—An inspection was made of the municipal water supply system of Perth Amboy on May 29, 1912. The water is ordinarily derived from 57 driven wells which flow by gravity into a suction well. On account of the deterioration of the screens in 35 of the driven wells, it was necessary to discontinue their use and to make up this deficiency. About one million gallons per day is obtained from Prickett's Pond, and a contract has been awarded for driving new wells near the abandoned ones in order that only ground water may be used.

PHILLIPSBURG.—The Lehigh Water Company of Easton, Pa., who supply a few consumers in Phillipsburg, N. J., having installed a hypochlorite plant, an inspection was made of the same on September 6, 1912.

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This inspection showed that the water which is obtained from the Delaware River was treated with hypochlorite in about the proportion of .36 parts per million available chlorine.

PLEASANTVILLE.—The Pleasantville Water Company which supplies the town of this name has a surface supply.

On July 15th, this supply was visited to determine the cause of an unfavorable analysis. Thirteen analyses of the Pleasantville supply have been made from April 29, 1909, to April 6, 1912. The colon bacillus has been indicated absent 5 times, present in 10.0 c. c. 4 times, and present in 1.0 c. c. 4 times. The July sample showed B. coli to be indicated in 0.1 c. c.

The supply is derived from a small watershed just southwest of Pleasantville. Bargaintown Pond, at the lower end of the shed, acts as a storage reservoir. This pond is about one and a quarter miles long, and has an average depth of 5 feet. A pumping station is located at the lower end of the pond, and water flows over a dam through a grid and through a water wheel then into the creek below the dam. The suction pipe is in an intake well at the side of the stream, water entering the well through a loosely built wall. The other three sides and bottom of the well are tight.

There are several farm buildings at the pumping station, and surface drainage from the yard and buildings enters the pond within 100 feet of the overflow dam. The residence is occupied by the engineer's family of four or five people. The land on one side of the pond back of the buildings is under cultivation. Portions of the opposite shore and some of the area at the headwaters of the pond are marshy.

From the result of the investigation it seemed most likely that pollution of the intake was due to surface drainage from these premises. The watershed above this point is wooded territory and has very little population.

In accordance with recommendations made, improved conditions were found here in October.

The source of the indicated B. coli in samples of the pond and tap water taken in July is not plainly evident, but that these results indicate dangerous pollution is most improbable.

PRINCETON.—On April 24, 1912, an inspection was made of the water supply system of the Princeton Water Company.

The supply is derived from two deep driven wells, and from a dug well, into which lead a number of terra cotta pipes for collecting ground water some distance from the well.

The water from the driven wells is pumped by the air lift process into an open concrete reservoir having a capacity of about 275,000 gallons.

Considerable trouble has been had with microscopic organisms in this reservoir during the summer months. B. coli has been found present in a large number of samples from this supply, and it is probable that the source of this is from dust from the neighboring fields blowing into the open reservoir. The average daily consumption is about 275,000 gallons.

RAHWAY.—About November 20, 1911, it came to our notice that the City of Rahway had pumped raw water directly into the distribution system.

On November 20, 1912, a representative visited Rahway and found that on account of changes necessitated when installing a new pump some raw water was by-passed the filters for a period of about 37 hours. The dose of hypochlorite, which was about 0.1 part per million available chlorine, was not increased during this time.

Within a few weeks after the introduction of the raw water into the distribution system, several cases of typhoid fever developed in Rahway, and although there is some doubt whether this was caused by the water or not, it shows clearly the danger of such practices.

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During March, 1912, a complete test of this plant was made in co-operation with Prof. E. B. Phelps, who is Consulting Bacteriologist for the city. As a result of this test the following recommendations were made:

First.—A sedimentation basin should be constructed which would give at least two hours' actual storage. This tank should be so constructed as to give the greatest possible efficiency in settling out the suspended matter, and in forming a satisfactory flock.

Second.—The effective size of the sand in the filters is too large for efficient results. There should be added to each filter enough sand of such a size that would reduce the effective size to at least 0.47 millimeters, and which would not increase the uniformity coefficient beyond 1.6.

Third.—There should be placed on the outlets from the sulphate of alumina and hypochlorite tanks float boxes having adjustable, graduated hard rubber orifices.

Fourth.—Some better method of mixing the calcium hypochlorite solution should be adopted, as the present one is very crude and does not get all the chemical into solution.

These recommendations were transmitted to the city and as a result orifice boxes were installed, and plans are being made for a sedimentation basin. New sand has also been ordered for the filters.

RAMSEY.—On March 26, 1912, plans for a water supply system for the Borough of Ramsey were approved. Construction work on this plant has not yet been started.

RIEGELSVILLE.—On May 7, 1912, the following report was made:

At Riegelsville there is a paper mill and about five houses supplied with water from Riegelsville, Pa. The supply is piped over the bridge from springs on the property of Mrs. Lee S. Clymer, of Riegelsville, Pa. Mrs. Clymer informed me that there were seven springs, each enclosed in a concrete basin and covered. The springs are located in an open field some distance away from habitation. The pipe line was extended over to New Jersey about 1890.

RIDGEWOOD.—An inspection was made on August 21, 1912, of the Midland Park plant of the Bergen Water Company.

The hypochlorite apparatus here is very crude, and it was recommended that an up-to-date calibrated orifice box be installed for regulating the flow of the chemical.

About the middle of August B. coli was found present in samples of the water supplied by the Bergen Water Company, and on inspection it was found that on account of a break in the delivery pipe at the Hohokus plant, that a considerable amount of polluted water had entered the distribution system, and that when the plant was again started this water was distributed throughout the city. B. coli persisted in constantly smaller amounts until about the first of October since which time it has been absent.

An up to date calibrated orifice box has been purchased by the company in accordance with recommendation made in report of August 21st.

ROCKAWAY.—Samples of the water from the supply furnished by the Borough of Rockaway having shown B. coli in large numbers the authorities were notified of conditions, and on April 3, 1912, they requested that an investigation be made of the situation. Accordingly on April 8, 1912, an inspection was made. This inspection disclosed the fact that the supply is derived from surface flow, collected from a drainage area of about 1.9 square miles. The larger part of the water is derived from waste water from the mines of the Empire Steel & Iron Company, and samples taken of this waste water at several points all showed the presence of B. coli.

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The condition of this watershed was such that it did not seem possible ever to obtain water of a satisfactory quality from it, and therefore on April 16, 1912, it was ordered—"That the attention of the authorities of the Borough of Rockaway be called to the fact that this Board believes that the water supplied to consumers in Rockaway is unfit for potable uses, and that said authorities be notified that they must at once take steps to provide a satisfactory supply."

In accordance with the above order the Borough employed engineers to go over the situation and report on same. These reports outlined several possible remedies which the town is considering at the present time.

ROEBLING.—The water furnished by the John A. Roebling's Sons Company at Roebling, having shown B. coli in large numbers, a representative visited the filter plant August 28, 1912, and September 5, 1912. These visits showed that the hypochlorite apparatus was very crude and subject to stoppages, which undoubtedly accounted for the poor quality of the water. It was recommended that this plant be remodeled by installing large solution tanks and a calibrated orifice box.

On October 25, 1912, we were notified that the hypochlorite plant had been remodeled and a calibrated orifice float box installed in accordance with the above recommendations.

SALEM.—At the request of the Superintendent of the Salem Water Department an inspection was made of this supply on July 9, 1912.

In a sample of water collected from this supply on June 22nd the presence of the colon bacillus was indicated in 0.1 c. c. Eleven samples of Salem tap water have been analyzed during the period from May 13, 1909, to June 22, 1912. The colon bacillus has been indicated absent four times, present in 10.0 c. c. three times, present in 1.0 c. c. three times, present in 0.1 c. c. once.

The supply is taken from a pond in Quinton about four miles from Salem. Water is pumped from the pond to one section of what was at one time a slow sand filter, but which now merely serves as a storage reservoir or settling basin, the sand having been removed. From here the water runs down into four wells each 270 feet deep, located at the side of the pond. Along side of these "supply" or "down feed" wells there are 10 wells 284 feet deep, and 16 wells 135 feet deep. In these latter wells water stands within seven feet of the surface, and by means of suction the water is pumped into the distribution system. The purpose of the "down feed" wells is to augment the natural supply of ground water. Without pumping in this pond water, it is stated that the natural supply is not sufficient.

The original plans at Salem provided for the use of surface water, filtered, and driven well water. As this arrangement did not give sufficient water, the "down feed" wells were added to increase the quantity. The filters were thus abandoned as filters. The sand was removed in one section with the exception of a layer one or two inches in depth, and the basin merely used as a supply tank for the "down feed" wells. It was expected that sufficient filtration of the ground water would occur through the soil to duplicate the action of the sand filter.

As the casings of the "down feed" and the 16 new wells of 135 feet depth, ran down but 30 feet, and as there is a suction well within seven feet of each "down feed" well, it is probable that very little filtration of the surface water occurs. In the absence of a continuous casing for the entire length, the present depth of the wells undoubtedly is much less than the original depth.

The average daily consumption of water in Salem is about 600,000 gallons, and about 90,000 gallons of this amount is supposed to be added to the "down feed" wells each day.

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The pond itself is subject to pollution by cattle and by surface drainage from two occupied properties about 100 yards above the intake. This district is but sparsely settled, yet it is quite accessible to visitors. The presence of the colon bacillus in 0.1 c. c. would not be unexpected in the pond water. The polluted character of the tap water might, therefore, be due to imperfect filtration of surface water through the "down feed" wells.

There is also another circumstance that accounts for the presence of the colon bacillus in the tap water. At times of fire in Salem, pond water is pumped directly into the distribution system. Thus since January 1, 1912, there have been four such occasions. The dates and period of pumping from the pond direct are given below:

January 27th	1 hour and 10	minutes
March 9th	25	"
April 5th	6 hours and 30	"
June 10th	1 hour and 10	"

There is no standpipe in Salem and the distribution system is supplied direct from the pumping station. Under the present arrangement it appears necessary to draw from the pond direct for extra supply in case of fire.

As has been intimated there are two sand filter basins. Only one of these is used as a supply tank for the "down feed" wells. The sand has not been removed from the other one, which is still used, the surplus water pumped at night being allowed to flow from the distribution system into this filter. The effluent runs to a suction well near the pumping station and goes into the system again.

As a result of this investigation it would appear that the filtration of the pond water through the "down feed" wells is insufficient and not an adequate safeguard. The pumping of pond water directly into the distribution system should be stopped and changes made that will permit such a step without lessening the fire protection service.

On July 25, 1912, recommendations were sent to the Salem City Council, advising them to improve the condition of this supply.

No action has been taken toward carrying out any of the above recommendations as yet.

SEA ISLE CITY.—Several samples from the supply of the Sea Isle City Water Company having shown the presence of B. coli, a representative visited Sea Isle City on June 7, 1912, and investigated the situation.

The supply is derived from one flowing driven well 863 feet in depth. It was found that there was a small amount of leakage through a valve on a line which originally ran from the well to an ice plant nearby, but which is now cut off just beyond the valve. This valve is at all times covered with water which is undoubtedly polluted. Since this leak was stopped B. coli has been absent in the water.

SEWELL.—On January 9, 1912, plans for the distribution system of the Sewell Water Company were approved. The source of the supply is a flowing well, 8 inches in diameter and 80 feet deep. On March 26, 1912, this source was approved. The system was put in operation about July 1, 1912.

SKILLMAN.—In September, 1911, a temporary calcium hypochlorite plant was installed at the filter plant of the State Village for Epileptics and at the same time it was recommended that better arrangements be made for dosing the water with sulphate of alumina. This recommendation was carried out and early in November, 1911, the apparatus was installed. Inspections made since that time have shown that the filter was operating satisfactorily and that a safe water was being produced.

At the time of the inspection in November it was found that sewage from the buildings was getting into the water supply and that this put a heavy

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load on the filter. Since a new sewer was being constructed, however, it was thought that this condition would only last a few weeks, and for that short time it would be satisfactory to heavily dose the sewage tanks daily with calcium hypochlorite.

During June, 1912, it was reported that cattle belonging to the institution were allowed to pasture along the banks and wade in the stream feeding the reservoir. It was recommended by the Board that this practice be discontinued.

Early in July, 1912, Dr. Weeks, Superintendent of the Institution, requested an opinion as to the condition of the ice and water supply.

Two reports were made on this subject and on July 9, 1912, Dr. Weeks was notified "that while probably no disease is at present resulting from the existing condition of your water and ice supply, nevertheless, it would be wise for the managers of your institution to take up in the near future the advisability of receiving purer and safer supplies of water and ice for said institution."

About the middle of August, 1912, an inspection was made and it was found that sewerage was still entering the water supply.

On September 3, 1912, the following recommendations were transmitted to Dr. Weeks:

"First.—That the sewage be kept out of the stream either by turning it into the new sewer, or by pumping out the cesspool and hauling away the daily accumulation.

"Second.—That a permanent apparatus for adding calcium hypochlorite be installed so that in case it is later proven necessary to use the bleach the apparatus will be on hand in case of emergency."

The first recommendation has been carried out but the money is not available for the second as yet.

SMITHVILLE.—This supply owned by the H. B. Smith Machine Company is derived from two driven wells 110 feet deep, located in the yard of the machine shop. The water flows from these wells naturally, and to remove iron the water is aerated by being sprayed into an open tank. From this point it flows on to a rapid sand filter for the removal of precipitated iron. The effluent flows into a clear water tank directly beneath the floor on which rests the aerating tank. The tanks and the filter are located in rooms partitioned off in one of the shop buildings.

A small pump driven by a water wheel forces the water into the distribution system and into an elevated wooden storage tank.

The indicated presence of the colon bacillus in the tap water last July prompted an investigation. Samples of the well water direct showed B. coli absent, whereas further samples of the filtered water again gave a positive result. The cause of this condition was not determined absolutely but as there was a suction line to Rancocas Creek connected to the pump it is possible that creek water was at times sucked into the supply. Representatives of the Company were certain that the valve cutting out the creek supply was never opened and did not leak. Upon our recommendation, however, the creek intake was disconnected. Subsequent analyses have shown B. coli absent.

SOUTH ORANGE.—Plans for a water supply system for the village of South Orange were approved March 19, 1912.

The supply is to be derived from driven wells about 275 feet deep. The construction of this plant is under way at the present time.

SOUTH PLAINFIELD.—Several complaints were received late in 1911 in regard to the quality of the water furnished by the Middlesex Water Company at the South Plainfield plant.

The source of the water is driven wells and a pond. The pond water is filtered through a rapid sand filter. This filter has caused much trouble in the past.

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An inspection was made May 13, 1912, and as a result on May 21, 1912, it was ordered that the Company be notified to put their filtration plant in first-class condition, adding a hypochlorite plant for the treatment of the water, if necessary, so that a satisfactory quality of water may be furnished to consumers at all times.

On May 23, 1912, the filter was sealed by a representative of this Department.

On July 13, 1912, permission was given to the Company to break the seal and start the filter, since it had been overhauled and a hypochlorite plant installed.

Inspections were made on July 16th and July 25, 1912, and it was found that the filtered water was being treated with calcium hypochlorite in the proportion of about 0.43 parts per million available chlorine. About 1,500,000 gallons of the pond water was being treated in the same proportion and pumped to the Rahway plant of the Company where it was filtered.

The Company having realized that the South Plainfield supply was an unsatisfactory one, had four wells drilled near the City of Plainfield on Park Avenue. Three of the wells are 12 inches in diameter and 300 feet deep, and the other 6 inches in diameter and 200 feet deep. They all flowed without pumping. The water from them was shown by analysis to be of a satisfactory quality, and on July 16, 1912, the source was approved by the State Board of Health. Since about August 1, 1912, the water from this new source has been used to supply the district formerly supplied by the South Plainfield plant and the latter plant has been used to furnish raw water for the Rahway filter plant, when the reservoir at that point is low.

SPRING LAKE.—Samples of the water from the municipal plant at Spring Lake having shown B. coli, inspections were made on March 5th and April 16, 1912.

"The supply is obtained from seven wells about 700 feet in depth. Five wells are 6 inches in diameter and two are 8 inches. From the wells the water is pumped by air lift to a concrete reservoir, having a capacity of 150,000 gallons. From the reservoir the water is pumped into the distributing system."

Samples collected on the first visit showed B. coli, but samples collected on the last visit from each well after 96 hours pumping showed B. coli absent in 10.0 c. c. It seems that the wells were new and that in driving the wash water was obtained from a nearby pond. This undoubtedly was the source of the contamination.

STANHOPE.—On July 9, 1912, plans for a water supply system of the Borough of Stanhope were approved.

These plans contemplate obtaining the water from driven wells and pumping it to a concrete reservoir and nearby hill from which it enters the distribution system. The work is now under construction.

SUMMIT.—At the request of the local health officer a representative of this department visited Summit on July 9, 1912, in an attempt to locate the source of the B. coli, which had been present in the last few samples of the supply of the Commonwealth Water & Light Company.

The supply is obtained from two separate sources, both driven well supplies, and known as the Canoe Brook Supply and the Green Brook Supply. Analyses of samples had shown that the pollution was all occurring in the Green Brook Supply.

A careful inspection showed three possible sources of pollution, and upon the attention of the Company being called to this they were immediately rectified, and since this time better results have been obtained.

TOMS RIVER.—A complaint was made to this office in regard to the water furnished by the Toms River Water Company containing iron.

An inspection was made on March 26, 1912, which showed that the trouble was due to the complainant's residence being located on a dead end

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at a considerable distance from the center of town, thus giving very little circulation in the distribution system at that point. It would seem that the only prevention for this would be frequent flushing and the Company was advised to this effect.

TUCKERTON.—On July 23, 1912, the water supply system of the Tuckerton Water Company was inspected and reported on in part as follows:

"The source of this supply is the main stream supplying Pohatcong Lake. A suction well is located at the lower end of the lake, and water is conducted from the stream to the suction well through a wooden flume, 18 inches by 20 inches. This flume is about 1,300 feet long and is supported on piling, the flume being submerged several feet beneath the surface of the lake.

The suction well is a round wooden tank 8 feet in diameter and 6 feet deep, covered with a conical board roof. It sets in the lake along the road that runs over the dam at the foot of the pond. The sides of the suction tank are sunk about 2 feet in sand. Surrounding it is a tight circle of planking set about 5 feet in the sand bottom of the lake and extending up to within about 2 feet of the lake surface.

Water is raised from this well or tank to an elevated tank of about 40,000 gallons capacity. A Davis triplex, vertical pump is used for this purpose, it being connected by a belt and shafting to a water wheel. Power is also available from a second water wheel and from a gas engine. The pump is located in an ice manufacturing building just across the road from the suction well.

The pump is worked about 8 hours daily in summer, and about 6 in winter, the respective average daily consumptions being 35,000 and 30,000 gallons. The population of the Borough of Tuckerton is about 1,500.

There is also a 300 feet driven well with a 4 inch casing at the side of the pump house. This well is connected up with the distribution system but is not used.

The head waters of the stream are about 6 miles above the intake, and the stream flows through a cedar swamp most of its course. The water is highly colored. It is also claimed that the flume and suction tank are tight so that the water from the main stream only enters the tank. The branch stream is said to drain a cranberry section where there is some population. There are one or two buildings on the shore of the pond.

VINCENTOWN.—The water supplied by the Vincentown Water Company having shown B. coli in large numbers at all times, on June 23, 1912, it was ordered that the authorities be notified of the unsatisfactory quality of the water and that some method must be adopted to improve the quality of the same.

WHITE HORSE.—On January 9, 1912, permission was granted Mr. W. V. McGalliard of White Horse to sell water for potable purposes. The supply is derived from a well six inches in diameter and 70 feet in depth.

WILDWOOD.—On account of a change in the chemical analysis of the water furnished by the Wildwood Water Company, an investigation was made on November 15, 1911.

The Wildwood Water Company owns and operates the water works system furnishing water to all of the towns on Five-Mile-Beach Island, including Wildwood, Wildwood Crest, North Wildwood, Anglesea and Holly Beach. During the winter the population supplied is about 5,000, but in the summer months this number runs up to 70,000.

The Wildwood Water Company now owns three distinct pumping stations and systems of wells. The first plant was built at Wildwood in 1895 and consisted of a pumping station and one drilled well, 1,002 feet deep. One well 860 feet deep, and five wells 330 feet deep, were added in 1896 and 1905 respectively. In 1908 the Company bought out the water plant of the Five-Mile-Beach Water Company, located at Anglesea. At this time this plant

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consisted of a pumping station and one well 335 feet deep. Since that time there has been added two wells of the same depth and another pump.

During the past year the Water Company has built a pumping station and installed wells in Rio Grande, about one mile west of the Rio Grande station of the Pennsylvania Railroad. There are 19 wells, 50 feet in depth at this place.

The water works system is a continuous one and the three plants represent three points of entrance of water to the system.

The station at Wildwood has been in use almost continuously from 1895 up to November, 1911. The Anglesea station has been used during the period from May to October of each year.

With the Rio Grande station, now in operation, it is the intention of the Company to take all the water from this source, reserving the other two stations merely for emergencies.

From the superintendent's books it was found that on May 17th only the Wildwood plant was supplying water to the system. On August 7th water was being pumped both from the Wildwood and Anglesea plants, and on November 9th all water was coming from the new plant at Rio Grande. The variation in the analyses of samples of water collected from taps in Wildwood on these dates may thus be explained.

The site of the Rio Grande wells is in a sandy soil covered by a thickly wooded swamp. This swamp is constantly fed from an abandoned mill pond on Green Creek, the dam being located on the edge of the swamp. The pond water is very highly colored.

The nineteen wells are connected with two main lines, 12 wells with one and 7 with the other. The wells are constructed so that the suction pipe extends down into the iron sheath pipe, the latter being open at the top. At the time of this inspection surface water was flowing into this open top of the most distant well on the 7-line.

On April 2, 1912, plans of the Rio Grande station were received and on April 16th these were approved.

A letter from the Company, dated April 10, 1912, stated that in order to keep out surface water they would make water tight joints with nipples between the casings and suction pipes in the last two wells.

On October 11, 1912, an inspection showed that the casings of the two end wells had been made continuous with the suction pipe which was apparently sufficient to exclude surface water.

WOODBURY.—On June 27, 1912, plans for a water filtration plant for the City of Woodbury were approved. These plans contemplate passing the water of Mantua Creek through a coagulation basin, and then pumping it through pressure filters to the present storage reservoir.

Beginning on July 12, 1912, a complete inspection was made of Mantua Creek above the Woodbury intake. Only one pollution was discovered, but it was seen that large numbers of cattle were allowed access to the creek which would account for the high B. coli figures which are shown by the analyses of the water.

B. coli continuing in large numbers, about the middle of July a calcium hypochlorite plant was installed for treating the water. This plant was inspected on two separate occasions, and it was found that the rate of application was about .5 parts per million available chlorine, but that effective B. coli removal was not obtained.

No action has been taken as yet toward building a filtration plant, as the town is now considering the installation of a driven well supply. Test wells are being drilled and samples have been analyzed from some of these.

YARDVILLE HEIGHTS.—On October 8, 1912, plans for a water supply system for the real estate development of Yardville Heights were approved.

The supply is derived from a spring and is pumped to an elevated tank by gas engine driven pumps. C. A. Comp of Trenton, N. J., is the owner of the plant.

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PUBLIC WATER SUPPLIES

TOWNS	SUPPLIED BY
Atsion	Pleasantville Water Co. (see Pleasantville).
Auguckanunk Township	Passaic Water Co. (see Delawanna).
Avenel	Plainfield-Union Water Co. (see Rutherwood).
Allenhurst	Borough of Allenhurst.
Allentown	Borough of Allentown.
Ampere	City of East Orange (see East Orange).
Angiesea	Wildwood Water Works Co. (see Wildwood).
Annandale	Clinton Water & Water Supply Co. (see Clinton).
Arlington	Montclair Water Co. (see Little Falls).
Asbury Park	City of Asbury Park.
Asbury Park	Monmouth County Water Co. (see Neptune Township).
Atlantic City	City of Atlantic City.
Atlantic Highlands	Borough of Atlantic Highlands.
Audubon	Haddonfield Water Co. (see Haddonfield).
Avalon	Borough of Avalon.
Avon	Monmouth County Water Co. (see Neptune Township).
Avondale	Montclair Water Co. (see Little Falls).
Barnegat	Barnegat Water Co.
Basking Ridge	Bernards Water Co. (see Bernardsville).
Bayhead	Bayhead Artesian Water Co.
Bayonne	Montclair Water Co. (see Little Falls).
Beach Haven	Borough of Beach Haven.
Beach Haven Terrace	Fidelity Land Co.
Beachwood Heights	Watchung Water Co. (see Dunellen).
Belleville	City of Newark (see Newark).
Belmar	Borough of Belmar.
Belvidere	Belvidere Water Co.
Belvidere	Buckhorn Springs Water Co.
Bergenfield	Hackensack Water Co. (see New Milford).
Bernardsville	Bernards Water Co.
Beverly	Delaware River Water Co.
Blackwood	Blackwood Water Co.
Blairstown	Blairstown Water Co.
Bloomfield	Montclair Water Co. (see Little Falls).
Bloomingdale	Butler Water Co. (see Butler).
Bloomsbury	Bloomsbury Water Co.
Bogota	Bogota Water & Light Co.
Boonton	United Water Supply Co.
Bordentown	City of Bordentown.
Bound Brook	Bound Brook Water Co.
Bradley Beach	Monmouth County Water Co. (see Neptune Township).
Bradley Park	Monmouth County Water Co. (see Neptune Township).
Branchville	Borough of Branchville.
Brant Beach	Beach Haven North Co.
Brick Church	City of East Orange (see East Orange).
Bridgeport	Bridgeport Water Co.
Bridgeton	City of Bridgeton.
Bridgewater Township	Bound Brook Water Co. (see Bound Brook).
Brown's Mills	Brown's Mills Water Co.
Burlington	City of Burlington.
Butler	Butler Water Co.
Caldwell	Essex Fells Electric Light & Water Co. (see Essex Fells).
Califon	Califon Water Co.
Camden	City of Camden.
Camden	Stockton Water Co.
Cape May City	City of Cape May.
Cape May Court House	Neptune Water Co.
Cape May Point	Borough of Cape May Point.
Carlstadt	Hackensack Water Co. (see New Milford).
Carlton Hill	Hackensack Water Co. (see New Milford).
Carteret	Middlesex Water Co. (see Rahway).
Chatham	Borough of Chatham.
Chrome	Middlesex Water Co. (see Rahway).
Cinnaminson Township	Riverton-Palmyra Water Co. (see Riverton).
Clarksboro	Charles Stewart
Clarksboro	Joseph Clark
Clayton	Clayton-Glassboro Water Co.
Clementon	Clementon Spring Water Co.
Clifton	Montclair Water Co. (see Little Falls).

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OF NEW JERSEY.

SOURCE.	TREATMENT.	APPROXIMATE DAILY CONSUMPTION IN GALLONS
Wells	Filtration	50,000-200,000
Pond	Filtration	12,000
Wells	Filtration	600,000
Wells and Absecon Creek		8,000,000-12,000,000
Wells	Filtration	150,000
Well		
Well		15,000
Wells		15,000-150,000
Wells		75,000
Well		
Wells		150,000-1,000,000
Delaware River		100,000
Buckhorn Creek and Spring		125,000
Passaic River		150,000
Wells		500,000
Cedar Lake		30,000
Well		50,000
Spring & Pine Hollow Brook		40,000
Well		30,000
Brook		750,000
Springs		400,000
Middle Brook and Wells		275,000
Dry Brook		
Well		
Wells		
Tumbling Dam Pond	Filtration	1,400,000
Well		25,000
Delaware River	Filtration	850,000
Wells		90,000
Springs		
Wells		10,000,000
Wells		1,500,000-1,750,000
Wells		1,097,000
Wells		20,000
Wells		10,000-40,000
Wells		
Well		1,000
Well		
Wells		150,000
Well and Spring		40,000

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PUBLIC WATER SUPPLIES

TOWN.	SUPPLIED BY
Cliffside Park	Hackensack Water Co. (see New Milford).
Clinton	Clinton Water & Water Supply Co.
Closter	Hackensack Water Co. (see New Milford).
Collingwood	Merchantville Water Co. (see Merchantville).
Colonia	Middlesex Water Co. (see Rahway).
Columbus	Columbus Water Co.
Como	Borough of Spring Lake (see Spring Lake).
Corson's Inlet	Corson's Inlet Water Co.
Coytesville	Hackensack Water Co. (see New Milford).
Cranbury	Cranbury Water Co.
Cranford	Plainfield-Union Water Co. (see Netherwood).
Cresskill	Hackensack Water Co. (see New Milford).
Crosswicks	Crosswicks Water Co.
Deal	New Jersey Water & Light Co.
Deal Beach	New Jersey Water & Light Co. (see Deal).
Deal Boro.	Tintern Manor Water Co. (see Long Branch).
Delair	Merchantville Water Co. (see Merchantville).
Delanco	Delaware River Water Co. (see Beverly).
Delawanna	Yantacaw Water Co.
Delford	Hackensack Water Co. (see New Milford).
Demarest	Hackensack Water Co. (see New Milford).
Dover	Town of Dover.
Dumont	Hackensack Water Co. (see New Milford).
Dunellen	Watchung Water Co.
East Newark	Montclair Water Co. (see Little Falls).
East Orange	City of East Orange.
East Rutherford	Hackensack Water Co. (see New Milford).
East Summit	Commonwealth Water & Light Co. (see Summit).
Eatontown	Tintern Manor Water Co. (see Long Branch).
Edgewater	Hackensack Water Co. (see New Milford).
Edgewater Park	Delaware River Water Co. (see Beverly).
Egg Harbor City	Egg Harbor City Water Co.
Elberon	Tintern Manor Water Co. (see Long Branch).
Elizabeth	Elizabethtown Water Co.
Elmer	Elmer Water Co.
Emerson	Hackensack Water Co. (see New Milford).
Englewood	Hackensack Water Co. (see New Milford).
Englewood Cliffs	Hackensack Water Co. (see New Milford).
Essex Fells	Essex Fells Electric Light & Water Co.
Fair Haven	Tintern Manor Water Co. (see Long Branch).
Fairview	Hackensack Water Co. (see New Milford).
Fanwood	Plainfield-Union Water Co. (see Netherwood).
Flemington	Flemington Water Co.
Fords	Middlesex Water Co. (see Plainfield).
Fort Lee	Hackensack Water Co. (see New Milford).
Freehold	Town of Freehold.
Frenchtown	Frenchtown Water Co.
Garfield	Borough of Garfield.
Garwood	Plainfield-Union Water Co. (see Netherwood).
German Valley	German Valley Water Co.
German Valley	M. J. Welsh.
Gibbsboro	John Lucas & Co.
Gibbstown	E. I. du Pont de Nemours Powder Co.
Gladstone	Dr. M. C. Smalley.
Glassboro	Clayton-Glassboro Water Co.
Glen Gardner	Glen Gardner Water Co.
Glen Lake	Glen Lake Water Co.
Glen Ridge	Orange Water Co.
Glen Rock	Bergen Water Co. (see Midland Park).
Gloucester	Gloucester City.
Grantwood	Hackensack Water Co. (see New Milford).
Grasselli	Elizabethtown Water Co. (see Elizabeth).
Grenloch	Bateman Manufacturing Co.
Guttenburg	Hackensack Water Co. (see New Milford).
Hackensack	Hackensack Water Co. (see New Milford).
Hackettstown	Town of Hackettstown.
Haddonfield	Haddonfield Water Co.
Haddonfield	Borough of Haddonfield.
Haddon Heights	United Water Co.

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OF NEW JERSEY.

SOURCE.	TREATMENT.	APPROXIMATE DAILY CONSUMPTION IN GALLONS
Beaver Brook and Well		100,000
Wells		
Well		8,500
Well		15,000
Spring		
Wells		
Well		11,000
Springs and Wells	Disinfection	130,000
Wells		225,000
Wells		3,200,000
Wells		150,000
Wells, Elizab'h & Rahway Rivers	Filtration and Disinfection	14,000,000
Well		
Wells		150,000
Well and Raritan River		200,000
Wells		400,000
Nishisakawik Creek		
Wells		300,000
Spring		
Springs		
Well		
Wells		
Spring		
Wells		100,000
Spring		
Well		1,100
Little Falls		
Wells	Filtration	1,500,000
Well		
Mine Hill & Morris Co. Reservoir	Filtration	
Springs and Well		250,000
Spring and Wells		110,000
Haddonfield Water Co.		125,000

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PUBLIC WATER SUPPLIES

TOWN.	SUPPLIED BY
Haledon	Borough of Haledon
Hammonton	Town of Hammonton
Hampton	Junction Water Co.
Hanover Township	Morris Aqueduct Co. (see Morristown).
Harrington Park	Hackensack Water Co. (see New Milford).
Harrison	Montclair Water Co. (see Little Falls).
Hasbrouck Heights	Hackensack Water Co. (see New Milford).
Haskell	E. I. du Pont de Nemours Powder Co.
Haworth	Hackensack Water Co. (see New Milford).
Haworth	Haworth Water & Light Co.
Helmetta	Geo. W. Helm Co.
High Bridge	Borough of High Bridge
Highlands	Borough of Highlands
Highland Park	City of New Brunswick (see New Brunswick).
Hightstown	Hightstown Water Co.
Highwood	Hackensack Water Co. (see New Milford).
Hillsdale	Hackensack Water Co. (see New Milford).
Hillsdale Manor	Hackensack Water Co. (see New Milford).
Hilton	Commonwealth Water & Light Co. (see Summit).
Hoboken	Hackensack Water Co. (see New Milford).
Hohokus	Bergen Water Co. (see Ridgewood).
Holly Beach	Wildwood Water Co. (see Wildwood).
Holly Beach	Holly Beach, Wildwood, N. Wildwood Water Co.
Hopewell	Borough of Hopewell
Interlaken	Monmouth Water Co. (see Neptune Township).
Irvington	Commonwealth Water & Light Co. (see Summit).
Island Heights	Island Heights Water, Power, Gas & Sewer Co.
Ivy Hill	Commonwealth Water & Light Co. (see Summit).
Jamesburg	Jamesburg Water Co.
Jersey City	City of Jersey City
Junction	Junction Water Co. (see Hampton).
Kearny	Montclair Water Co. (see Little Falls).
Keasby	City of Perth Amboy (see Perth Amboy).
Kenilworth	New Orange Park, Water, Heat, Light & Power Co.
Keyport	Town of Keyport
Kingsland	Hackensack Water Co. (see New Milford).
Kirkwood	Lakeside Park Water Co.
Lakehurst	Lakehurst Sewer Co.
Lakewood	Lakewood Water Co.
Lambertville	Lambertville Water Co.
Laurel Springs	Laurel Springs Water Supply Co.
Lawrenceville	James Hullfish.
Leonia	Hackensack Water Co. (see New Milford).
Lincoln	Watchung Water Co. (see Dunellen).
Linden	Elizabethtown Water Co. (see Elizabeth).
Lindenwold	Haddonfield Water Co. (see Haddonfield).
Linwood	Pleasantville Water Co. (see Pleasantville).
Little Falls	Montclair Water Co.
Little Ferry	Hackensack Water Co. (see New Milford).
Little Silver	Tintern Manor Water Co. (see Long Branch).
Little York	Community Supply.
Lodi	Hackensack Water Co. (see New Milford).
Lodi	Borough of Garfield (see Garfield).
Loch Arbour	Monmouth County Water Co. (see Neptune Township).
Loganville	Bernards Water Co. (see Bernardsville).
Long Branch	Tintern Manor Water Co. (see West End & Middletown Twp.)
Longport	Borough of Longport
Lucaston	John Lucas Co. (see Gibbsboro).
Lumberton	Lumberton Light, Water & Sewage Co.
Lyndhurst	Hackensack Water Co. (see New Milford).
Lyons Farm	Elizabethtown Water Co. (see Elizabeth).
Madison	Borough of Madison
Mahwah	Cragmere Water Co.
Mahwah	John Winters
Mahwah	Albert Winter
Manasquan	Borough of Manasquan
Mantoloking	Louis Downer.
Mantua	Job Scott.
Maple Shade	Maple Shade Water Co.

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OF NEW JERSEY.

SOURCE.	TREATMENT.	APPROXIMATE DAILY CONSUMPTION IN GALLONS
Springs	Filtration	250,000
Wells		120,000
Rocky Run and Springs		100,000
Spring and Wells		300,000-400,000
Well		8,000
Wells		15,000
Springs & Willoughby Brook		100,000
Wells		100,000
Wells	Filtration	150.000
		29,000
Well		15,000
Wells		15,000
		570,000
Wells		60,000-240,000
Wells		75,000
Rockaway River	Disinfection	41,000,000
Well		2,500
Wells	Filtration	250,000
Well		
Well		10,000
Wells		750,000
Brook	Filtration	300,000
Wells		100,000
Wells		10,000
Passaic River	Filtration	28,000,000
Wells		120,000
Rancocas Creek		10,000
Wells		225,000
Well		21,000
Well		4,000
Spring		
Wells		40,000
Wells		5,000-25,000
Wells		12,000
Well		

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PUBLIC WATER SUPPLIES

TOWN.	SUPPLIED BY
Maplewood	Commonwealth Water & Light Co. (see Summit)
Margate City	Margate City Water Department
Marion	City of Jersey City (see Jersey City).
Marlton	Marlton Water Co.
Matawan	Borough of Matawan
Mays Landing	Mays Landing City
Mays Landing	Mays Landing Water Power Co.
Maywood	Hackensack Water Co. (see New Milford).
Medford	Medford Water Co.
Mendham	Borough of Mendham
Merchantville	Merchantville Water Co.
Metuchen	Middlesex Water Co. (see Plainfield).
Mickleton	August Eichler.
Mickleton	Jeremiah Haines.
Middletown Township	Tintern Manor Water Co.
Midland	Hackensack Water Co. (see New Milford).
Midland Park	Bergen Water Co. (see Ridgewood).
Milburn	Commonwealth Water & Light Co. (see Summit)
Milford	Mine Springs Water Co.
Millington	Millington Water Co.
Millville	Millville Water Co.
Millville	Peoples Water Co.
Monmouth Beach	Tintern Manor Water Co. (see Long Branch).
Montclair	Montclair Water Co. (see Little Falls).
Moorestown	Moorestown Water Co.
Morristown	Morris Aqueduct Co.
Morris Township	Morris Aqueduct Co. (see Morristown).
Morris Plains	Morris Aqueduct Co. (see Morristown).
Morsemere	Hackensack Water Co. (see New Milford).
Mount Holly	Mount Holly Water Co.
Mountain Lakes	Hillcrest Water Co.
Mount Tabor	Camp Meeting Asso. of Newark Con. M. E.
Mullica Hill	Harrison Heights Improvement Co.
Murray Hill	Commonwealth Water & Light Co. (see Summit).
National Park	National Park Hotel
Naughright	Community
Navesink Beach	Tintern Manor Water Co.
Neptune City	Monmouth County Water Co. (see Neptune Township).
Neptune Township	Monmouth County Water Co.
Netcong	Borough of Netcong
Netherwood	Plainfield-Union Water Co.
Newark	City of Newark
Newbold	Westville-Newbold Water Co. (see Westville).
New Brunswick	City of New Brunswick
New Durham	Hackensack Water Co. (see New Milford).
New Lisbon	Burlington County Water Co.
New Market	Watchung Water Co. (see Dunellen).
New Milford	Hackensack Water Co.
New Providence Borough	Commonwealth Water & Light Co. (see Summit).
New Providence Township	Commonwealth Water & Light Co. (see Summit).
Newton	Town of Newton
Nordhoff	Hackensack Water Co. (see New Milford).
Normandie	Tintern Manor Water Co. (see Long Branch).
Normandie Heights	Normandy Water Co.
North Arlington	City of Jersey City (see Jersey City).
North Bergen	Hackensack Water Co. (see New Milford).
Northfield	Pleasantville Water Co. (see Pleasantville).
North Hackensack	Hackensack Water Co. (see New Milford).
North Plainfield	Plainfield-Union Water Co. (see Netherwood).
North Wildwood	Wildwood Water Works Co. (see Wildwood).
Norwood	Hackensack Water Co. (see New Milford).
Nutley	Montclair Water Co. (see Little Falls).
Oaklyn	Haddonfield Water Co. (see Haddonfield).
Ocean City	Ocean City Water Co.
Ocean Gate	Great Eastern Building Corporation
Ocean Grove	Ocean Grove Camp Meeting Association
Oceanic	Tintern Manor Water Co. (see Long Branch).
Oceanport	Tintern Manor Water Co. (see Long Branch).
Ocean Township	Tintern Manor Water Co. (see Long Branch).

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OF NEW JERSEY.

SOURCE.	TREATMENT.	APPROXIMATE DAILY CONSUMPTION IN GALLONS
.....	.....	370,000
Well	.....	4,500
Wells	Filtration	100,000
Wells	.....	50,000
Lake Lenape	.....	.....
Rancocas Creek	.....	.....
Springs and Brook	.....	15,000
Wells	Filtration	800,000
.....	.....	150,000
Well	.....	.....
Well	.....	500
Hop and Yellow Brooks	Filtration	9,500,000
.....	.....	57,000
Well	.....	6,000
Well	.....	12,000
Union Lake	Filtration	100,000
Wells	Filtration	230,000
Pensauken Creek	Filtration	325,000
Springs and Wells	.....	930,000
.....	.....	15,000
Rancocas Creek	Filtration	350,000
Springs	.....	75,000-100,000
Wells	.....	20,000
Well	.....	.....
Jumping Brook and Well ...	Filtration	700,000
.....	.....	3,500
Wells	.....	4,500,000
Pequannock River	.....	40,000,000
Lawrence Brook	Disinfection	3,500,000
Rancocas Creek	.....	45,000
Hackensack River	Filtration	25,000,000
Morris Lake	.....	600,000
Wells	.....	20,000-200,000
Wells	.....	250,000-1,000,000
Well	.....	5,000-10,000
Wells	.....	600,000-1,000,000

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PUBLIC WATER SUPPLIES

TOWN.	SUPPLIED BY
Oradell	Hackensack Water Co. (see New Milford).
Orange	City of Orange.
Overbrook	Laurel Springs Water Co. (see Laurel Springs).
Overpeck	Hackensack Water Co. (see New Milford).
Oxford	Empire Steel & Iron Co.
Palisades Park	Hackensack Water Co. (see New Milford).
Palisades Township	Hackensack Water Co. (see New Milford).
Palmyra	Riverton Palmyra Water Co. (see Riverton).
Passaic	Montclair Water Co. (see Little Falls).
Passaic Township	Morris Aqueduct Co. (see Morristown).
Paterson	Montclair Water Co. (see Little Falls).
Paulsboro	Paulsboro Water Co.
Pedricktown	Pennsgrove Water Supply Co.
Pemberton	Pemberton Township Water, Sewerage & Light Co.
Pennington	Pennington Spring Water Co.
Pennsgrove	Pennsgrove Water Supply Co.
Pensauken	Merchantville Water Co. (see Merchantville).
Pensauken	J. N. Wilkins.
Perth Amboy	City of Perth Amboy.
Phillipsburg	Peoples Water Co.
Phillipsburg	Lopatcong Water Co.
Phillipsburg	Lehigh Water Co., Easton, Pa.
Piscataway Township	Bound Brook Water Co. (see Bound Brook).
Pitman	Pitman Water Co.
Pitman	Camp Meeting Association.
Plainfield	Middlesex Water Co.
Plainfield	Plainfield-Union Water Co. (see Netherwood).
Pleasantville	Pleasantville Water Co.
Point Pleasant	Point Pleasant Water Works Co.
Port Reading	Middlesex Water Co. (see Plainfield).
Princeton	Princeton Water Co.
Quinton	City of Salem.
Rahway	City of Rahway.
Rahway	Middlesex Water Co.
Raritan	Somerville Water Co.
Red Bank	Borough of Red Bank.
Ridgefield	Hackensack Water Co. (see New Milford).
Ridgefield Park	Hackensack Water Co. (see New Milford).
Ridgewood	Bergen Water Co.
Riegelsville	Mrs. Lee S. Clymer.
River Edge	Hackensack Water Co. (see New Milford).
Riverside (Bergen Co.)	Hackensack Water Co. (see New Milford).
Riverside Township	Delaware River Water Co. (see Beverly).
Riverton	Riverton-Palmyra Water Co.
Rockaway	Borough of Rockaway.
Roebling	John A. Roebling's Sons Co.
Roseland	Essex Fells Electric Light & Water Co. (see Essex Fells).
Roselle Borough	Plainfield-Union Water Co. (see Netherwood).
Roselle Park	Plainfield-Union Water Co. (see Netherwood).
Roosevelt	Middlesex Water Co. (see Plainfield and Rahway).
Rumson Borough	Tintern Manor Water Co. (see Long Branch).
Rumson	Rumson Improvement Co.
Runyon	City of Perth Amboy (set Perth Amboy).
Rutherford	Hackensack Water Co. (see New Milford).
Salem	City of Salem (see Quinton).
Scotch Plains	Plainfield-Union Water Co. (see Netherwood).
Sea Bright	Tintern Manor Water Co. (see Long Branch).
Sea Girt	Sea Girt Water Co.
Sea Isle City	Sea Isle City Water Co.
Seaside Park	Borough of Sea Side Park.
Secaucus	Hackensack Water Co. (see New Milford).
Sewaren	Middlesex Water Co. (see Plainfield).
Sewell	Sewell Water Co.
Short Hills	Short Hills Water Co.
Shrewsbury Township	Tintern Manor Water Co. (see Long Branch).
Smithville	H. B. Smith Co.
Somerdale	Haddon Heights Land & Improvement Co.
Somers Point	Pleasantville Water Co. (see Pleasantville).
Somerville	Somerville Water Co. (see Raritan).

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OF NEW JERSEY.

SOURCE.	TREATMENT.	APPROXIMATE DAILY CONSUMPTION IN GALLONS
Rahway River		2,000,000
Springs		
Wells		
Rancocas Creek		88,000
Wells and Springs		80,000
Wells	Filtration	60,000
Wells		4,000
Wells and Pond		6,500,000
Delaware River		1,200,000
Merrill Brook		600,000
Delaware River	Disinfection	3,500,000
Well		60,000
Wells and Pond	Filtration	1,200,000
Bargaintown Pond		400,000-1,000,000
Wells		40,000-250,000
Wells		250,000
Wells and Pond		700,000
Rahway River	Filtration	3,500,000
Rahway River	Filtration	6,000,000
Raritan River	Filtration	1,000,000
Wells		300,000
Wells	Disinfection	900,000
Springs		
Well		400,000
Brook		
Delaware River	Filtration	130,000
		550,000
Wells	Filtration	75,000
Well		50,000-75,000
Well		50,000-800,000
Wells		15,000
Wells		
Wells		
Wells	Filtration	20,000
Well		5,000

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PUBLIC WATER SUPPLIES

TOWN.	SUPPLIED BY
South Amboy	City of Perth Amboy (see Perth Amboy).
South Cape May	City of Cape May (see Cape May).
South Englewood	A. A. Hutchinson.
South Orange	Commonwealth Water & Light Co. (see Summit).
South Orange Township	Commonwealth Water & Light Co. (see Summit).
South Plainfield	Middlesex Water Co. (see Plainfield).
South River	Borough of South River.
Sparta	Dr. T. H. Andress.
Sparta	David Fisher.
Sparta	Robert M. Smith.
Springfield	Short Hills Water Co. (see Short Hills).
Spring Lake	Borough of Spring Lake.
Stirling	Stirling Water Supply Co.
Stockton	Borough of Stockton.
Stone Harbor	Stone Harbor Water Co.
Stratford	Laurel Springs Water Supply Co. (see Laurel Springs).
Summit	Commonwealth Water & Light Co.
Surf City	Surf City Water Co.
Sussex	Borough of Sussex.
Swedesboro	Woolwich Water Co.
Teaneck	Hackensack Water Co. (see New Milford).
Tenafly	Hackensack Water Co. (see New Milford).
Toms River	Toms River Water Co.
Trenton	City of Trenton.
Tuckerton	Tuckerton Water Co.
Union (Bergen Co.)	Hackensack Water Co. (see New Milford).
Union (Union Co.)	Elizabethtown Water Co. (see Elizabeth).
Ventnor	City of Ventnor.
Verona	Essex Fells Electric Light & Water Co. (see Essex Fells).
Vincentown	Vincentown Water Co.
Vineland	Borough of Vineland.
Wallington	Borough of Wallington.
Wanamassa	Monmouth County Water Co. (see Asbury Park).
Washington	Washington Water Co.
Weehawken	Hackensack Water Co. (see New Milford).
Wenonah	Wenonah Water Co.
West Allenhurst	Monmouth County Water Co. (see Asbury Park).
West Avon	Monmouth County Water Co. (see Asbury Park).
West Cape May	City of Cape May (see Cape May).
West End	Tintern Manor Water Co.
Westfield	Plainfield-Union Water Co. (see Netherwood).
West Hoboken	Hackensack Water Co. (see New Milford).
Westmont	Merchantville Water Co. (see Merchantville).
West New York	Hackensack Water Co. (see New Milford).
West Orange	Montclair Water Co. (see Little Falls).
West Point Pleasant	Point Pleasant Water Works Co. (see Point Pleasant).
Westville	Westville-Newbold Water Co.
Westwood	Hackensack Water Co. (see New Milford).
Wharton	Borough of Wharton.
White Horse	W. N. McGalliard.
Whitesville	Monmouth County Water Co. (see Asbury Park).
Wildwood	Wildwood Water Works Co.
Wildwood Crest	Wildwood Water Works Co. (see Wildwood).
Williamstown	Monroe Water Co.
Woodbine	Woodbine Land & Improvement Co.
Woodbridge	Middlesex Water Co. (see Plainfield).
Woodbridge Township	City of Perth Amboy (see Perth Amboy).
Woodbury	City of Woodbury.
Woodbury Heights	City of Woodbury (see Woodbury).
Woodlynne	Merchantville Water Co. (see Merchantville).
Woodridge	Hackensack Water Co. (see New Milford).
Woodstown	City of Woodstown.
Wortendyke	Bergen Water Co. (see Ridgewood).
Wrightstown	Wrightstown Water, Electric Light & Sewer Co.
Wyoming	Commonwealth Water & Light Co. (see Summit).
Yardville Heights	C. A. Comp.

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OF NEW JERSEY.

SOURCE.	TREATMENT.	APPROXIMATE DAILY CONSUMPTION IN GALLONS
Lake		
		460,000
		57,000
Well		
Spring		
Spring		
Glen Brook		
Wells		150,000
Wells		100,000
Wells		25,000
Well		6,000-40,000
Wells		2,500,000
Wells		
Lake Rutherford		100,000
Wells		80,000
Wells		150,000
Delaware River	Disinfection	18,000,000
Pohatcong Lake		32,000
Wells		
Rancocas Creek		
Wells		600,000
Wells and Spring		140,000
Roaring Rock Brook		
Wells		40,000
Whale Brook	Filtration	3,000,000
Wells		50,000
Well		
Wells		13,900,000
Wells		30,000
Wells		110,000
		300,000
Mantua Creek	Disinfection	600,000-700,000
Wells		90,000
Well		10,000
		57,000
Spring		

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Bottled Water Supplies of New Jersey.

GEORGE T. PALMER, M. S., ASSISTANT TO THE CHIEF.

Mr. F. E. Daniels, Chief, Division of Sewerage and Water Supplies, Board of Health of the State of New Jersey, Trenton, New Jersey:

DEAR SIR—I beg to submit the following report on the bottled waters sold in New Jersey, for the year ending October 31, 1912:

Chapter 253, Laws of 1909, paragraph 2, reads as follows:

"Every person or corporation intending to furnish water for potable purposes shall submit to the Board of Health of the State of New Jersey a detailed report containing all information regarding the source from which supply is to be derived, and until such source has been approved by the Board of Health of the State of New Jersey, it shall be unlawful for said person or corporation to distribute such water to any consumer or consumers for potable purposes."

Under this act, the State Board of Health requires vendors of bottled waters, before placing the water on sale, to secure approval of their supply.

An inspection is made of the source and bottling house by representatives of the Board, and samples of water are collected for analysis. Approval has been granted for 7 new supplies during the year as follows:

Name.	*Location.*	*Proprietor.*	*Date Approved.*
Sanhican Spring	Trenton Junction	Wm. J. Lawver	Jan. 9, 1912
Washington Spring	Washington's Crossing.	Flurton & Rogers	Mar. 12, "
Arctic Artesian	Trenton Junction	James Breese	Apr. 2, "
Echo Spring	Ewingville	J. W. Vernam	Apr. 2, "
	Mercerville	S. G. Shaw	Apr. 9, "
Blue Mountain Spring.	Trenton	Home Ice & Products Co.	Sept. 10, "
Belmar Spring	Glen Rock	Belmar Spring Water Co.	Oct. 1, "

Some of the parties who were granted permission to sell have not yet placed this water on the market.

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Bottled water companies in existence prior to the passage of this act are not bound to apply for permission to sell, though, of course, their plants are subject to the supervision of the Board.

One or more inspections have been made of each bottled water plant of which we have record. A brief digest of these reports is here presented, and analyses of the water will be found in a table at the end of this report.

ALPHA SPRING.—This supply is located in Springfield Township, Union County, and is operated by Jacob Haussling of Newark. The spring is in the woods and bubbles up into a cement and stone basin, which is covered by a small shed. A bottling house is located a few feet from the spring. The bottles, 5 gallon and 6 pint, are filled from a pipe in the basin wall. Bottles and stoppers, glass and cork, are soaked in water heated in a large iron kettle, then rinsed in warm water and cold spring water before filling. The water is sold in Newark and the Oranges.

ARCTIC ARTESIAN.—This supply is taken from a driven well 125 feet deep, located on the poultry farm of J. B. Breese, in Trenton Junction. The well and the pump driven by a gas engine are located in a feed mixing house. The water is put out in one gallon bottles, which are filled directly from the pump spout. The bottles, with the stoppers in place, are soaked in a tub of hot water. The bottles are then unstoppered and placed in a tub of boiling water. After shaking they are rinsed and drained. This water is sold exclusively in Trenton.

ARTOIS TABLE WATER.—The source of this water is a 113 feet driven well located in Hopewell. John C. Burton is the proprietor of this business. The well is in the bottling house. This well has a natural flow and runs into a marble basin and thence into an automatic bottle filler.

The bottles used are five gallon demijohns, having cork stoppers, and six pint bottles with glass stoppers. For washing the bottles there are two wooden tubs, with well water heated to the boiling point with live steam. The bottles are soaked, drained and then placed upon an automatic washing machine. For the five gallon bottles there is a rotary rubber expansion brush, which thoroughly scrubs the bottles inside and out and at the same time water is injected into the bottles. The six pint bottles are also placed upon an automatic washer. This washer consists of three bristle brushes. While the bottle is forced over the center brush, the two outer brushes also revolve and at the same time jets of water are forced over the inside and outside. After this both sets of bottles are drained and placed upon a machine which injects a stream of water into the bottle. The bottles are then drained and ready for filling. The cork and glass stoppers are also washed and rinsed. After the bottles are filled and corked, they are sealed and inspected and are ready for shipment. All the water used for washing or rinsing is from the well and is pumped up to a tank, holding 3,200 gallons, located above the filling room. The bottling house looks clean and well kept. This water is sold in Trenton and Skillman.

BELMAR SPRING.—This is located in Glen Rock, Bergen County, and is on the premises of H. E. Stockwell, the proprietor. The spring bubbles up into a concrete basin covered by a small frame house. This water was not on the market up to September 18, 1912.

BLUE MOUNTAIN SPRING.—This water is sold in Trenton by the Home Products and Ice Company. The bottling house is located in Trenton. The water is shipped to Trenton as ice which is cut from a spring fed lake in

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Mt. Bethel Township, Northampton County, Pa. This lake is owned by the Company. An inspection of this lake and tributaries failed to reveal any pollutions. After being cut the cakes are cleaned by planing. The ice is shipped to Trenton in refrigerator cars.

The large cakes are then cut into small pieces. After being handled with the hands the pieces are rinsed in running water, (melted ice water) and with metal rods are placed into two and three gallon glass jars. The jars are sealed, the water being removed through a tap. The ice supposedly melts slowly so that ice water is at all times available.

A clean appearing bottling room has been fitted up in the ice storage house. The jars are soaked in tubs of cold city water. After draining, the jars are steamed with live steam, drained, rinsed in melted ice water, and then filled with ice. Improved bottle washing facilities are planned.

COLD INDIAN SPRING.—This water put out by the Cold Indian Spring Water Company is derived from a spring located about four miles northwest of Asbury Park. The spring bubbles up into a small covered concrete basin. A concrete well, 7 feet high, partially surrounds this basin, the object being to divert surface drainage. Water is pumped from the basin to a covered porcelain-lined, steel tank of 1,000 gallons capacity, located in the bottling house. Six pint bottles with patent stoppers, and five gallon demijohns with cork stoppers are used, new corks always being used. Before inserting corks a piece of tin foil is placed across the mouth of the demijohn. A large wooden vat filled with spring water, heated with live steam, and having a considerable amount of bottler's washing soda in it, is used to soak the bottles. After soaking and draining they are placed upon automatic washing machines, having expansion rubber brushes revolving at a high rate of speed, while at the same time a stream of spring water is injected into bottles as well as over the outside. After washing, the bottles are placed upon a rinsing machine, which injects spring water inside and over the outside. The six pint bottles, after being cleaned, are placed in cases, six bottles to a case, carried to the automatic filler, filled and immediately corked. The five gallon demijohns are filled by hand with a small rubber hose attached to a tap. This water is sold chiefly in Belmar, Asbury Park, Elberon, Allenhurst and New York City.

CULM ROCK SPRING.—This supply is sold by J. A. and W. E. Maxwell, the spring being located on their farm, which is on the main road between Somerville and Pluckemin. The spring is in a cement basin which is within a small cement and stone house. Water flows by gravity through a 2 inch galvanized iron pipe to the bottling house a short distance away. There are two sizes of bottles used, 2 quart bottles and 5 gallon bottles. The bottles are soaked in spring water heated to the boiling point by live steam, rinsed and scrubbed with a bristle brush in hot water, then rinsed with a stream of spring water. The 2 quart bottles are filled by an automatic bottle filler. The five gallon bottles are filled through a small piece of rubber hose connected to a tap. The corks are also washed in boiling water and rinsed, and after being placed in the bottles are sealed. This water is sold chiefly in Raritan, Somerville, Bound Brook, Dunellen and New Brunswick.

ECHO SPRING.—This spring is located on the farm of J. W. Vernam in Ewingville, Mercer County. The water is pumped from the covered spring house to a galvanized iron tank in the bottling house. The bottles are filled from a tap on this tank. The washing of bottles is done in the kitchen of the house, the bottles being placed in tubs of boiling water. The bottles are rinsed before filling. The supply is sold in Trenton.

ENGLEWOOD HYGEIA WATER.—The Englewood Hygeian Ice Company take this water from a 360 foot driven well in their ice house in Englewood. The water is filtered through a pressure filter and then distilled. The bottles

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are filled through a rubber hose on the condenser. The bottling room is part of the ice house. The water is placed on the market in six pint bottles which are washed in a wooden vat of distilled water heated with live steam. Englewood receives this water.

GREY ROCK ARTESIAN WATER.—This water is marketed by A. H. Ashton and J. B. Garrison of Trenton. Water is taken from a 147 foot driven well located on the Ashton farm in Ewing Township, Mercer County. The well is within the bottling house. Water is pumped from the well by hand to a zinc lined storage tank. The bottles are filled from a tap on this tank. The bottles used are one gallon bottles with cork stoppers. For cleaning the bottles a large wooden vat is provided, divided into two compartments. In the first compartment the bottles are washed in hot well water, containing a small amount of Wyandotte cleaning powder, and whenever necessary, shot is used in the bottles. In the second compartment, which contains warm well water, the bottles are rinsed and then placed on drain boards and drained. They are then ready for filling. The corks used are taken directly from the bag and placed in the bottles. The water used in the washing vat is carried in buckets from the pump. A small stove is provided to heat the water in the vat. The water is sold in Trenton.

GREAT BEAR SPRING.—The source of this water is in Fulton, N. Y. This supply has not been inspected this year.

GREAT NOTCH SPRING.—The Great Notch Spring Water Company secures water from a spring located at Great Notch. This spring is in the woods and the spring and surrounding ground is leased from the owner. The water bubbles up through the shale rock into a covered concrete basin, and from here is pumped through a small tank of bone black, known as a Bushing filter, to a 30 gallon galvanized iron tank. The bottles are filled from a tap on the tank. The bottling house is a one-story frame building near the spring. The one room is used as an engine room, store room, washing and filling room. Five pint bottles with attached stoppers are used. These are washed in a wooden vat of unheated spring water to which some cleansing powder is added. After soaking for a while, the bottles are inverted over a revolving bristle brush. Following this the bottles are drained and then inverted over a stream of spring water. This Company is contemplating the erection of a new bottling house with provision for more thorough cleaning of bottles. This water is sold in New York City.

GREAT ROCK SPRING.—Mr. John J. Mitchell is proprietor of this bottled water supply. Water is derived from a spring on Mr. Mitchell's farm in Whippany. This spring is within the bottling house, the water accumulating in a concrete basin four feet high. The water is pumped from this basin by hand to a 100 gallon tank. Bottles are filled directly from a tap on this tank. Five gallon and five pint bottles are used with cork stoppers. Mr. Mitchell ships this water to Charles M. Decker & Sons of Orange, where it is removed from Mr. Mitchell's bottles and most of it used for carbonated soft drinks. Mr. Mitchell's bottles do not go out to consumers. On being returned to his premises, Mr. Mitchell has the bottles washed with a bristle brush and spring water.

INDIAN SPRING.—Joseph F. Tuttle of Rockaway markets this water, which is derived from a spring located on land owned by B. K. Stickel in a thickly wooded territory on Copperas Mountain near Rockaway. The spring is in a stone and cement basin, housed over. The water flows from the basin by gravity to the bottling house some distance away. The bottles, two-quart and five-gallon, are filled directly from the supply pipe and are stoppered with new corks. A large wash tub, filled with hot spring water is used for cleaning purposes. This water is sold in Dover, Boonton and Rockaway.

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INDIAN LADY HILL SPRING.—This spring is located three miles west of Asbury Park, the water being marketed by the Indian Lady Hill Spring Water Company. The water collects from 8 sub-surface tile drains, into a covered concrete basin. This basin is divided into three compartments to favor sedimentation. From the last compartment water is pumped by hand to a ten-gallon galvanized tank. Bottles are filled from a tap on this tank. Bottles are washed by being soaked in a wooden vat of cold spring water, containing a washing powder. The bottles are then shaken with shot and rinsed in spring water. Six pint bottles with patent stoppers and five gallon demijohns with cork stoppers are used as containers. This water is sold in Asbury Park, Belmar, Spring Lake, West End, Deal and Allenhurst.

This Company is contemplating the erection of a new bottling house, which is to be equipped with a boiler for washing purposes.

KANOUSE MOUNTAIN SPRING.—This spring is located in the woods on the side of Kanouse Mountain near Oakland. It is known as the R. Vernam spring, a woman of the same name being the owner of the premises. The spring is surrounded by a stone and cement basin within a small house. A concrete wall and gutter encircles the house to divert surface water. Water flows by gravity from the spring through a 3 inch galvanzied iron pipe to the bottling house 7,300 feet distant and 90 feet below.

Six pint bottles with glass stoppers and 5 gallon demijohns with cork stoppers are used as containers. The inspection and washing process is quite complete.

The shipments from this Company are made only in carload lots. A car of empties is run in on a siding and as fast as unloaded the bottles are placed upon an endless roller. Near the center of the building a man is stationed to inspect the bottles. When finding a bottle that has been used for anything other than water it is immediately broken. Six pint bottles after being inspected and passed are placed in a 20th Century Soaking Machine. This machine consists of iron shelves attached to an endless belt. each shelf holding ten bottles. After these shelves are filled they are conveyed very slowly through a strong alkaline solution at 100° C, thence from this solution through a tank of spring water at the same temperature, thence through a tank of spring water at a slightly lower temperature. This operation is very slow, giving ample time for soaking and rinsing.

The bottles after being taken from this machine are placed in their containers, and run along the rollers to the washers. Here the bottles are placed on a rotary washing machine, using a bristle brush on the inside and a rubber expansion brush on the outside. During this operation spring water is injected into the bottle and over the outside.

After this the bottles are placed in jackets upon a revolving table, the neck of the bottle being placed over a metal tube which injects another stream of water. After this operation the bottles are again placed in their containers and passed along the rollers to the filling machine. This machine works automatically. By pressing a small lever the machine, with six metal tubes, drops down into the necks of a case of bottles placed under the machine. The bottles being filled the machine releases itself. After leaving the machine the bottles are ready to be corked. The glass stoppers having been soaked in an alkaline solution and rinsed, and constantly kept under a stream of spring water, are then placed in the bottles. After corking the bottles are sealed and passed along the roller to the waiting freight car.

The five gallon demijohns go through a somewhat different washing process. Before filling they are soaked in a wooden tank filled with the heated alkaline solution, then rinsed and re-rinsed, then placed in jackets upon a revolving table, the necks being placed over metal tubes which inject into them a stream of spring water. After being drained they are placed under a filter, which consists of a galvanized pipe with 6 outlets, each having a

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small piece of ⅝ inch white rubber tubing to enter the neck of the demijohn. After filling a small piece of tinfoil is placed across the mouth, after which a cork is inserted, new corks always being used. The demijohns are not sealed.

The bottling house is two stories high, built of brick.

The second floor is used for storage. The first floor is divided into two rooms. The front room is used to bottle the demijohns and as a shipping room. The back room is used as a washing and filling room. The floors of the entire first floor are concrete with good drainage.

The Kanouse Mountain Water Company has been supplying water about six years. At the present time the output is sold in New York, Newark, Montclair, Orange and Jersey City.

KEYSTONE SPRING.—This supply is derived from a driven well 16 feet deep located near Taylorsville, Bucks County, Pa. The well is about 40 feet from the Delaware River, and is within a bungalow leased by James Kemble, Manager of the Keystone Water Company. Bottles are washed in the bottling house in Trenton and are hauled to Taylorsville and filled from the spout on the pump. The bottles are then corked and returned to the bottling house, where they are sealed before delivery. The bottling house is located at 314 and 316 Church street, Trenton. The building is divided into an office, a storage room, a washing room and a boiler room. Bottles are washed in a wooden vat divided into three compartments. The vat is filled with tap water which is heated with live steam. The bottles are soaked in the first compartment, drained and then washed by hand with a bristle brush in the second compartment; drained, then rinsed in the third compartment. After this they are drained and corked with new corks which have previously been scalded. In this condition the bottles are hauled to the well to be rinsed with well water and then filled. This water is sold in Trenton.

PARADISE SPRING.—This spring is located opposite the D. L. & W. R. R. freight station in Boonton. The railroad owns this spring and uses the water in its dining cars and in its restaurant at Hoboken. The spring emerges into a 2 foot perpendicular tile pipe section, which has a wooden cover. There is no house over the spring. Five gallon milk cans are used as containers, they being filled directly from a 4 inch pipe running from the tile basin.

PILGRIM SPRING.—Louis Freidman of Ridgefield Park is the proprietor of this bottled water, the spring being located on his premises in Ridgefield Park. The spring is in a concrete basin surrounded by a small frame house. A stone house adjoining the spring is used for bottling purposes. Two quart bottles with attached stoppers, and five gallon demijohns with new cork stoppers are used. The bottles are filled from an aperture in a galvanized iron pan into which a concrete gutter conducts the overflow from the spring basin. Washing of bottles is done in two concrete basins filled with cold spring water. This supply is sold in New York City.

POLAR SPRING.—This supply is owned and operated by William Burgess of Morrisville, Pa., and is located at Morris Heights, Pa. This water accumulates in a covered concrete basin, which is within a small house. The spring house is near the kitchen door of the dwelling. A short distance further away from the house there is located a stone building used as a bottling house. Bottles are washed in hot water and soap, and are rinsed in spring water before filling. Filling is done from a six-tap outlet on a 36 gallon covered tank suspended about 7 feet above the floor. A small pump, motor driven, raises the water from the spring to the tank. This water is sold in Trenton and Morrisville, Pa.

RED ROCK SPRING.—John Barry is the proprietor of the Red Rock Spring Water Company, which sells bottled water from a 240 foot driven well lo-

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cated in Midland Township, Bergen County. One pint, one quart and two quart bottles with metal caps and five gallon demijohns with cork stoppers are used to dispense the water in. The five gallon demijohns are soaked in a wooden vat 2 feet by 5 feet by 2 feet, filled with a strong alkaline solution, drained and then washed by hand with a bristle brush. After draining they are placed over a metal tube which injects a stream of spring water into the bottle.

Two National Soaking Machines are provided for the smaller bottles. These machines consist of shelves holding from 10 to 15 bottles, revolving through a tank of strong alkaline solution, taking about 12 minutes to make the circuit. By the time the circuit is completed the bottles are drained. After this they are placed upon washing machines with revolving bristle brushes, at the same time injecting a stream of water. The bottles are then placed over metal tubes which inject a stream of spring water into the bottle.

After the smaller bottles are thoroughly drained, they are filled with an automatic filler, and immediately placed under a capping machine, which places a metal cap upon the bottle.

The 5 gallon demijohns are filled direct from a one and one-half inch galvanized pipe, having a small outlet for this purpose.

The water is pumped from the well to the piping system. This water is sold mostly in Hackensack, Hasbrouck Heights and Englewood.

SOMERSET SPRING.—S. S. Swaim is the proprietor of this water company, and the spring is located on land owned and occupied by him in Franklin, Burns Township, Somerset County.

This spring is situated at the top of what is known as the Second Mine Mountain, and is surrounded by a basin built of cement and stone and covered with a cement house. The excess water flows into a reservoir built of cement and stone and covered with a shingle roof. From the reservoir the water is carried by gravity through a 1¼ inch galvanized iron pipe to the bottling house about one mile distant, and about 150 feet lower than the spring. This spring seems well protected from any source of drainage pollution. No surface drains were visible and the nearest buildings and houses are about one mile distant on ground about 150 feet lower. A portion of Mr. Swaim's wagon house has been fitted up as a bottling house, the floor of which is of cement with drains, and the walls of which are wainscoted. Two and one-half and four quart milk bottles are used as containers. The bottles are merely rinsed before filling, except when bottles show that they have been used for other purposes, then they are washed in hot water. The water flowing by gravity from the spring enters a Berkfeld filter, which consists of 16 stone cones, the water entering the cones from the bottom and flowing out at the top. This is enclosed in a steel lined jacket about 12 inches by 12 inches by 16 inches. From this the water flows through a ¾ inch galvanized pipe to the filling table. The bottles are filled direct from the tap, and as fast as filled a heavy paper stopper is inserted. They are then sealed and ready for shipment. The output is sold in New York City.

Improved methods of washing bottles are planned by this Company.

TRINITY SPRING.—This spring is located in Ridgefield Borough, Morsemere Section, Bergen County, and is leased by the Trinity Water Company, of which Mr. R. Jacobus is Vice-President. The spring is surrounded by a basin built of cement and stone and is covered with a roof of tight fitting lumber. The cement basin is extended about 2 feet above the ground to exclude surface drainage, although at the present time all surface water drains down the roadway some 30 feet distant. The water enters the basin through white trap rock and drains off through an overflow into a small brook, 400 feet distant. The bottling house is located on slightly lower ground, about 300 feet distant, and the water flows by gravity through a 3 inch iron pipe,

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tin lined, to the filling room. Six pint bottles with patent stoppers, and five gallon demijohns with cork stoppers, are used. A large tank filled with spring water and heated with live steam, is used to wash the bottles. Bristle brushes are also used to wash the inside of the bottle. After the bottles are thoroughly washed they are rinsed, then placed over a small pipe which injects a stream of spring water into them. They are then drained and ready for filling. The water flowing by gravity from the spring enters an International Filter, which is composed of two honey-combed disks, and between them a sheet of filter felt. This is enclosed in a steel jacket, tin lined. From this the water runs through a pipe with three outlets, from which the bottles are filled. New corks are always used as stoppers. The bottling house, 30 feet by 40 feet, is well lighted and ventilated, has a cement floor with drains and is sealed with yellow pine wainscoting. The output from this spring is sold in New York City.

WASHINGTON SPRING.—This supply is taken from a 115 foot driven well on the premises of J. G. Coleman in Washington's Crossing, was first put on the market by Messrs. Blurton & Rogers, of Trenton. These men soon sold out to Walter Firth, Jr., of Trenton. This water is not on the market at the present time.

WASHINGTON ROCK SPRING.—This spring is owned by J. P. Petteflou and is located on the Watchung Valley Road, about 3½ miles west of Plainfield, near the top of Washington Rock Mountain. This spring is surrounded with a basin of cement and stone and is covered by a stone house with a shingle roof. Fifteen feet west of the spring is a gully that carries off the surface water from the mountain. The water flows by gravity through a 2 inch galvanized pipe to the bottling house 3,500 feet distant. The elevation of the spring above the bottling house is about 150 feet. The bottling business is carried on by Henry P. Petteflou, mineral water being chiefly bottled. Spring water is bottled in ½ and 5 gallon bottles, having cork stoppers. New corks are used. After corks are inserted they are covered with wax paper and sealed.

A large vat is provided with spring water heated with live steam to soak and wash the bottles. The ½ gallon bottles are washed by a washing machine, while the five gallon bottles are washed by hand. After being washed they are rinsed in warm spring water. The bottles are filled from a tap on an International Filter through which the water first passes. The output is sold in Plainfield, Westfield, New Brunswick and Bound Brook.

WATCHUNG SPRINGS.—This supply is derived from a spring on the side of Watchung Mountain, about 2½ miles north of Plainfield. The spring is surrounded by a cement and stone basin, roofed over. From the spring the water flows by gravity to a covered stone and cement reservoir. There are several other springs but the one spring supplies the demand.

The bottles used are 6 pint and 5 gallon demijohns, having cork stoppers. A washing room is provided with a wooden vat, where the bottles and demijohns are boiled in spring water, by means of live steam. The six pint bottles are washed with a bottle washing machine. The five gallon demijohns are washed by hand. After being washed both sets of bottles are placed upon a machine which injects a stream of spring water and thoroughly rinses them. The filling room is supplied by a gravity flow of water from the reservoir 150 feet distant through a 1½ inch block tin pipe encased in a 2½ inch galvanized pipe provided with a twin outlet, allowing two bottles to be filled at one time. New corks are used. A small piece of tinfoil is placed across the mouth of the bottle and the cork inserted. The cork is then covered with an oiled paper and sealed. Mineral waters are also bottled here. The output is sold mostly in New York City and Trenton. Mr. J. A. Stratts is the proprietor of the Watchung Spring Water Company.

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TRENTON: River Intake.



TRENTON: Reservoir.

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Hypochlorite Treatment of the Water Supply at Trenton, New Jersey.

BY GEORGE T. PALMER, M. S., ASSISTANT TO THE CHIEF.

Mr. F. E. Daniels, Chief, Division of Sewerage and Water Supplies, Board of Health of the State of New Jersey, Trenton, New Jersey:

DEAR SIR—I beg to submit the following report on the hypochlorite treatment of the water supply at Trenton, N. J.:

The water supply of Trenton is the Delaware River, a stream heavily polluted with sewage. From a screened intake in the river, located at the Morrisville bridge, water is pumped up to a distributing reservoir from which the city is supplied by gravity. Typhoid fever has been endemic in Trenton for many years, and there have likewise been frequent sharp epidemic periods.

The fall of 1911 witnessed one of these typical severe outbreaks, when within a period of seven weeks there were reported 123 cases. The population of Trenton is about 97,000. Earlier in the fall, and before the epidemic appeared, there had been constructed a hypochlorite plant for the treatment of the water supply. This action had been taken by the city authorities as the first step to combat the continuous high typhoid which was presumably water borne.

The hypochlorite plant was completed in November, and treatment of the water was begun on November 9th. It was just about this time that the typhoid cases began to increase in number, starting with 12 cases for the week ending November 4th, the number gradually rose until it attained a maximum of 32 cases the first week in December.

When the plant was ready for operation, it was agreed upon by George A. Johnson, Consulting Engineer for the city, and repre-

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sentatives of the State Board of Health, that treatment should begin at the rate of 0.4 parts per million available chlorine. The typhoid epidemic was not anticipated at this time and no data were at hand to show the amount of hypochlorite necessary to effect satisfactory sterilization on unfiltered Delaware River water.

The city had not retained a bacteriologist to devote attention to the operation of the plant and no check was had on the effect of the treatment other than the occasional analyses made by the State Board of Health. These analyses of samples from taps and from the reservoir direct did not show the reduction in bacteria that was desired. Because of the alarming increase in typhoid cases, and conscious of the predicament in which the city was placed in having no water analysis laboratory of its own, the State Board of Health decided to assume a close supervision over the operation of the plant until the epidemic had subsided. Accordingly, on November 28th, the hypochlorite dose was increased to over 0.6 parts per million available chlorine. On December 3rd this was again raised to 0.8 parts per million.

The reduction in typhoid cases following this increased dosage was most gratifying. The number of cases reported by weeks for December was as follows: 32, 22, 12, 6, 3. The effect of the increased dose of November 28th should manifest itself in the reported cases about three weeks later, and this is what happened as shown in the report for the fourth week in December. But six cases were reported for the whole month of January. The epidemic period thus extended from the first of November through the third week of December.

The effect of the hypochlorite treatment on the water from day to day was made a matter of study by representatives of this Division. A résumé of this work together with a discussion of the results attained are presented in the following pages:

HYPOCHLORITE PLANT.

The hypochlorite plant is located at the pumping station. A small two story frame building was erected to house the tanks and provide storage room for the chloride of lime. There are two small mixing tanks, two solution tanks holding about 1,500 gallons each, and a single constant level dosing box with a calibrated hard rubber

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orifice. The solution is conducted to a gate chamber where it is mixed with the river water entering the suction well. From this point the water is pumped to a 110 million gallon distributing reservoir in the city. The average daily consumption of water in Trenton is from 18 to 20 million gallons. It requires about an hour and a half for water to reach the reservoir from the pumping station.

BACTERIOLOGICAL RESULTS.

During the month of December samples of water were collected several times daily from the river and from the inlet and outlet of the reservoir. Agar plates were incubated at 20° for 48 hours, and litmus lactose agar plates were incubated at 37.5° C. for 24 hours. The presumptive lactose bile test was used to determine the presence of the colon bacillus. A summary of this work is presented in Tables 1, 2 and 3.

There was no rain the first two weeks of December and the river water was clear until the 15th. The effect of the treatment was manifested by a slight decrease in the 20° count on the reservoir inlet samples. The count on the outlet samples was on the contrary much higher, indicating that the 20° bacteria had multiplied during their passage across the reservoir. On December 7th the bacterial count on both inlet and outlet samples had diminished. Storage in the reservoir slightly increased the count until December 13th, when the outlet samples showed smaller numbers than the inlet. On the 19th the outlet count again rose over the inlet and remained higher for the rest of the month. On December 28th, when the river count was 3,200, the outlet showed 4,000. The reduction in 20° bacteria effected by the hypochlorite was over 95% during most of the month. On December 7th the count at the inlet was reduced 96.8%; on December 14th 96.9%; on the 16th 98.8%, and on the 24th 99.5%.

The reduction in the 37.5° litmus lactose agar counts was not so marked. On the 7th the inlet samples showed a 70% reduction in the total count and 83% in the red colonies. On the 16th the total count was reduced 86% and the red colonies 87%. Passage across the reservoir apparently did not materially affect the red colony count, although the total count dropped slightly. The red colonies

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TABLE I.

20° AGAR COUNT (PER C. C.)

DATE.		RIVER.	RESERVOIR.		CITY TAPS.
			INLET.	OUTLET.	
November	29	——	36	460	
December	1	320	16	600	
"	4	203	*155	210	
"	5	34	*165	1350	160
"	6	200	* 40	140	
"	7	255	8	40	
"	9	211	16	12	
"	10	270	9	—	8
"	11	222	9	14	
"	12	307	8	10	
"	13	250	13	11	33
"	14	412	13	10	21
"	15	2020	67	10	
"	16	0000	102	65	
"	17	3600	39	45	70
"	18	1530	150	43	89
"	19	1370	37	84	
"	21	375	8	—	133
"	23	2620	81	274	
"	24	3600	18	350	
"	25	900	30	900	
"	27	2720	41	1800	
"	28	3200	—	4000	4000
"	30	—	*285	530	350
January	2	—	565	3490	3800
"	5	340	80	50	130

*Surface of reservoir near inlet.

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TABLE 2.

37.5° LITMUS LACTOSE AGAR COUNT (Per cc.)

(T—total count. R—red colonies.)

DATE.			RIVER.		RESERVOIR.				CITY TAPS.	
					INLET.		OUTLET.			
			T.	R.	T.	R.	T.	R.	T.	R.
November	29	.....	—	—	23	1	23	4		
December	1	.....	29	8	11	2	23	5		
"	4	.....	18	14	* 9	5	3	1		
"	5	.....	11	5	*12	0	11	1	23	4
"	6	.....	27	9	*18	1	6	0		
"	7	.....	28	6	8	1	15	1		
"	9	.....	36	12	12	4	14	3		
"	10	.....	47	13	5	1	9	2	8	3
"	11	.....	28	16	5	2	5	1		
"	12	.....	24	15	4	2	6	3		
"	13	.....	48	29	5	5	4	4	6	1
"	14	.....	19	3	10	2	5	1	5	1
"	15	.....	20	17	14	5	8	4		
"	16	.....	465	69	65	9	33	11		
"	17	.....	172	37	32	2	31	1		
"	18	.....	65	25	120	0	17	0	17	0
"	22	.....	25	3	5	2	8	2		
"	23	.....	70	35	19	1	13	5		
"	25	.....	35	8	10	1				
"	27	.....	28	6	27	0				
"	28	.....	190	30	—	—	22	3	21	2
"	30	.....			20	6	28	3	14	4
January	2	.....			23	1	11	2	18	2
"	5	.....	50	0	20	10	20	0	20	0

*Surface of reservoir near inlet.

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TABLE 3.

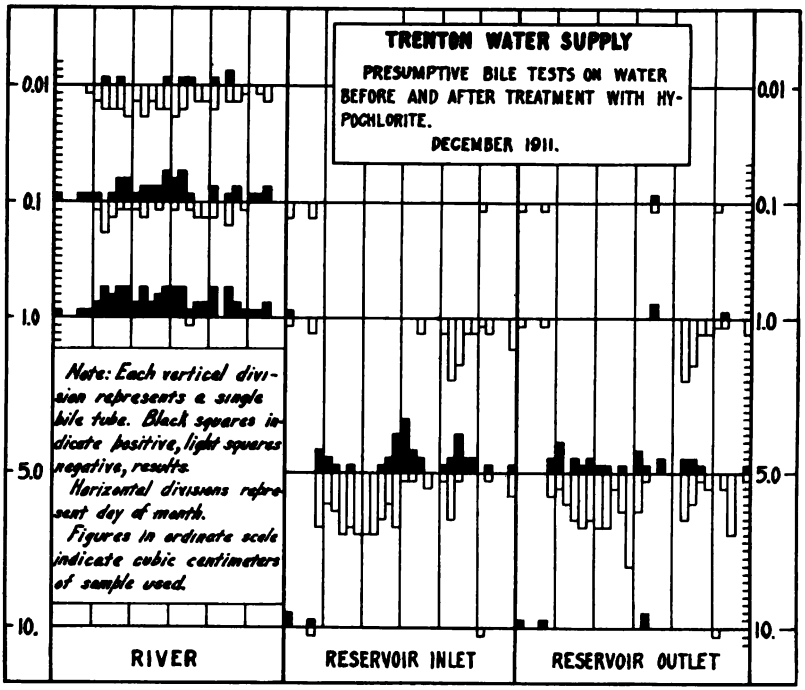
NUMBER OF POSITIVE AND NEGATIVE RESULTS. LACTOSE BILE.

DATE.	PER C. C. OF SAMPLE.																							
	RIVER.						RESERVOIR INLET.								RESERVOIR OUTLET.						CITY TAPS.							
	1.0		0.1		0.01		10.		5.		1.		0.1		10.		5.		1.		0.1		10.		5.		1.		0.1	
	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−
November 29							2	0			1	1	0	2	1	0			1	0	0	1								
December 1	1	0	1	0			2	0			1	1	0	2	1	0			0	1	0	1								
" 4	1	0	1	0			1	1			0	2	0	2	1	0			0	1	0	1								
" 5	1	0	1	0	0	1			3	7							2	3					2	3			0	5	0	5
" 6	2	0	1	1	0	2			2	4							4	2												
" 7	4	0	0	4	1	3			1	5							0	4												
" 8	3	0	1	2	0	3			0	8							2	6					0	1			0	1	0	1
" 9	4	0	3	1	1	3			1	7							1	7												
" 10	4	0	3	1	0	4			0	8							2	6							4	10				
" 11	2	0	1	1	0	2			0	8							1	7												
" 12	4	0	2	2	0	4			0	8							1	7												
" 13	2	0	2	0	0	2			1	6							0	2							4	23				
" 14	3	0	2	1	0	3			2	4							1	5							4	13				
" 15	4	0	4	0	1	3			5	7							0	12												
" 16	4	0	3	1	0	4			7	1							3	5												
" 17	4	0	4	0	1	3			3	1					2	0	1	1					1	0	0	1	0	1	0	1
" 18	1	1	1	1	1	0			2	0	0	2							2	0	1	1	1	0	1	0	1	1	0	1
" 19	2	0	0	2	0	2			0	2							2	0							0	2	0	1		
" 20	2	0	0	2	0	2																	0	2	2	0				
" 21	4	0	2	2	1	3			1	1	0	2											1	1	1	1				
" 22					0	0			2	6	0	8					2	6	0	8										
" 23	4	0	1	3	2	2			5	1	0	6					2	4	0	6										
" 24	2	0	2	0	0	2			2	0	0	2					1	1	0	2										
" 25	1	0	0	1	0	1			2	0	0	2					0	2	0	2										
" 26	1	0	1	0			0	1			0	1	0	1	0	1			0	1	0	1								
" 27	1	0	1	0	0	1			1	1	0	2					0	2	1	1										
" 28	2	0	2	0	0	2											0	8							0	2	0	2		
" 30									1	3	0	4					1	1	0	2					0	2	0	2		
January 2									2	4							1	2							0	3				

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CHART I.



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were unlike the red colonies on the river plates, being large, indistinct areas. Unfortunately, time could not be spared to isolate and identify these organisms. More dependence was placed on the bile results as an indicator of the effectiveness of the treatment. A standard of absence of gas in tubes inoculated with 5.0 c. c. of the sample was maintained until the period of rainy weather, beginning December 15th. As the same number of tubes were not used each day, and as the dilutions also varied, it is difficult to give a clear idea of what reduction was accomplished in the colon-like organisms. In Chart I an attempt has been made to show graphically the work done with the bile tubes and the significance of the results. The effect of the sterilization treatment is noticeable December 4th, when the river water gave gas in a tenth of a c. c., and the reservoir inlet sample no gas in 1.0 c. c. From that date on, the inlet and outlet samples showed a majority of the 5.0 c. c. tubes to be negative. By referring to the chart it may be seen at a glance that in the untreated river water the presence of B. coli is indicated frequently in one-hundredth c. c., a greater portion of the time in one-tenth c. c., and nearly always in one c. c. The inlet samples show B. coli consistently absent in 1.0 c. c. and absent most of the time in 5.0 c. c. The same holds true for the outlet samples, the reduction in B. coli being even more noticeable here. In the following table is expressed a summary of the bile results for the month of December:

TABLE 4.

C. C. SAMPLE.	RIVER.		RESERVOIR.			
			INLET.		OUTLET.	
	No. of Tubes.	*% Positive.*	*No. of Tubes.*	*% Positive.*	*No. of Tubes.*	*% Positive.*
.01	60	13	—	—	—	—
0.1	64	61	5	0	5	20
1.0	64	98	33	3	27	11
5.0	—	—	125	33	117	22
10.0	—	—	5	60	5	80

The positive 5.0 c. c. tubes of the inlet samples occurred in the periods of rainy weather when the turbidity in the river water became greater. The number of positive 0.1 c. c. tubes of the river

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water also increased at such times. The turbidity of the river water was 200 parts per million on December 15th, 125 on the morning of the 16th, and 70 in the afternoon of the same day. It dropped to 50 the next day, and remained near 25 for the balance of the month.

APPLICATION OF HYPOCHLORITE.

Because of rainfall again on December 26th, the hypochlorite dose was raised to 1.1 parts per million available chlorine. This was reduced to 0.8 again on the 28th. Table 5 shows the rate of application of the hypochlorite from the beginning of the treatment to De-

TABLE 5.

HYPOCHLORITE APPLICATION.

	DATE.	AVAILABLE CHLORINE IN PARTS PER MILLION.
	November 9, 1911	0.4
	" 24, "	0.4
X	" 28, "	0.7 Dose Decreased.
	December 3, "	0.8 " "
	" 4, "	0.8
	" 6, "	0.8
	" 7, "	0.9
	" 8, "	0.85
	" 9, "	0.95
	" 10, "	0.85
	" 11, "	0.75
	" 12, "	0.8
	" 13, "	0.8
	" 14, "	0.8
	" 15, "	0.75
	" 16, "	0.8
	" 17, "	0.8
	" 18, "	0.8
	" 23, "	0.75
	" 27, "	1.1 Dose Increased.
	" 28, "	0.8 " Decreased.

X—Due to the exhaustion of the bleach supply, treatment was entirely suspended from 1 A. M. to 6 P. M. on November 28th.

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cember 28th. On the dates recorded actual determinations of the strength of the bleach solution were made and the parts per million available chlorine computed on that basis. Conditions were not materially changed on intervening dates and it is assumed that the hypochlorite dose remained practically constant.

The strength of the bleach varied from 34.5% to 39% available chlorine. During December some difficulty was met in getting a uniform strength solution. Enough dry bleach was added to make a 2% solution, but analyses of the solution showed the strength to vary from 1.6% to 1.9%. It was found later that more thorough mixing and a preliminary screening of the bleach permitted a better yield.

EFFECT OF TREATMENT SINCE DECEMBER, 1911.

The routine bacteriological work was abandoned about the first of January and since this time the analytical work conducted by this Division has necessarily been irregular. In order to compare the condition of the water before and after the treatment began, a summary of the bacteriological results on the tap water from October, 1911, to November, 1912, is presented in Tables 6 and 7.

In Table 6 is given a monthly summary of the bacteriological results on the tap samples from October 1st to April 1st. The reduction in the bacteriological content for December and January is apparent. In February and March, however, severe rains caused high turbidity in the river water, and the 0.8 dose of hypochlorite

TABLE 6.

MONTHLY SUMMARY OF BACTERIOLOGICAL RESULTS ON SAMPLES OF TAP WATER. AVERAGE BACTERIOLOGICAL COUNT PER C. C.

MONTH.	ON AGAR AT 20°C			ON LITMUS LACTOSE AGAR AT 37.5°C			
	No. of Samples.		*Count*	*No. of Samples.*	*Total Count*	*No. of Samples.*	*Red Colony Count*
October, 1911	(11)		225	(14)	73	(6)	3
November, "	(21)		256	(19)	35	—	—
December "	(21)	X	90	(24)	13	(22)	2
January, 1912	(6)	XX	61	(7)	11	(10)	1
February, "	(6)		737	(6)	282	(3)	30
March "	(3)	XXX	1370	(3)	203	—	—

X—Omitting one count of 4,000.
XX— " " " " 3,800.
XXX— " " " " 41,000. (March 31st.)

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B. COLI INDICATED BY LACTOSE BILE.

MONTH.	C. C. OF SAMPLE USED.							
	10.		5.0		1.0		0.1	
	No. of Tubes.	*% Pos.*	*No. of Tubes.*	*% Pos.*	*No. of Tubes.*	*% Pos.*	*No. of Tubes.*	*% Pos.*
October, 1911	(12)	100	—	—	(14)	78	(14)	64
November, "	(26)	96	—	—	(26)	69	(26)	35
December, "	(12)	42	(70)	23	(14)	7	(8)	0
January, 1912	(32)	56	(19)	26	(13)	0	(1)	0
February, "	(37)	68	(31)	42	(28)	32	(15)	13
March "	(12)	83	(63)	84	(54)	35	(13)	8

TABLE 7.

BACTERIAL ANALYSIS OF TRENTON WATER.

MARCH—NOVEMBER, 1911.

DATE.	*Source of Sample.*	*Total Count 20° C.*	*Count 37.5°*		(*Presumptive Bile.*) *B. coli*			
			Total	*Red.*	10.	5.	1.	0.1
4/29/12	Tap in laboratory	300	35	0	½+		2—	
5/20/12	" " "	49	17		3+	3/5+	—	
6/17/12	" " "				2—		2—	2—
6/28/12	" " "				3+		3+	2/3+
7/2/12	" " "				3+		2/3+	1/3+
7/3/12	" " "				+		+	—
7/8/12	" " "				+		+	+
7/11/12	River at intake				½+		½+	2+
7/11/12	Reservoir intake, treated				2—		2—	2—
7/11/12	Tap in laboratory				+		+	+
8/13/12	" " "	142	28	0			1/5+	
9/26/12	River at intake	8950	500	85	2+		2+	2+
9/26/12	Reservoir at intake, treated	180	79	0	2+		2+	2—
9/26/12	Tap in laboratory	310	32	3	2+		2+	2+
10/28/12	" " "				+		—	—

Where fractions appear in the B. coli table, the denominator refers to the number of tubes used and the numerator to the number of tubes giving the result indicated by the sign following the fraction. Where but one tube has been used no number has been placed before the sign.

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failed to keep down the bacterial count. Either the river was not particularly infectious at this time or else the hypochlorite was sufficient to kill off the typhoid bacilli, for no increase in cases occurred immediately after this period. It is at these times of high turbidity that hypochlorite loses its effectiveness. Applied to a clear water its action may be satisfactory, but as a method of treatment for a surface water carrying large amounts of silt and sediment at times of rain, it is not sufficient.

In Table 7 are presented bacterial results of the few samples collected since March. The B. coli content of the tap water is much greater than we should expect for a water being treated with over 0.8 parts per million available chlorine. On July 11th the water at the intake gave negative results in 10.0 c. c., whereas the tap water showed positive in 0.1 c. c. On September 26th a perceptible reduction is noted in the counts but bile tubes still showed positive in the treated samples. It is well to call attention again to the fact that the B. coli work was not carried beyond the presumptive bile tests.

A record of the hypochlorite dosing from January to November, 1912, is presented in Table 8.

ODORS AND TASTES.

During February and March odors and tastes in the tap water were most evident. Consumers complained of tastes in the water as early as the middle of December. While it never became so

TABLE 8.

HYPOCHLORITE APPLICATION.

Date.	*Available Chlorine in Parts Per Million*
Jan. 19-25	1.0
Jan. 26-Feb. 23	0.8
Feb. 24-Mar. 7	1.0
Mar. 8-13	0.8
Mar. 13-17	1.0
Mar. 18-Apr. 11	0.8
Apr. 12-June 9	0.7
June 10-13	0.9
June 14-July 5	0.7
July 6-8	0.8
July 9-Aug. 15	0.9
Aug. 16-Sept. 17	1.0
Sept. 18-23	0.8
Sept. 24-Oct. 25	1.0
Oct. 26-Nov. 1	1.2

(These figures were obtained from the engineer's records at the pumping station.)

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objectionable as to make the water unsuitable for use, yet the characteristic chlorine odor was very noticeable at times of heavy turbidity. The tastes and odors seemed to fluctuate from day to day, being more perceptible one day than the next. During February and March the turbidity of the water was so marked that people could not even use the water for washing purposes to say nothing of using it for drinking. The dose was not materially increased during this period yet the taste and odor were very strong and bacteria were present in great number.

RELATION OF THE WATER SUPPLY TO TYPHOID FEVER.

Ever since 1901, when the Delaware River came into more general use as a receiving channel for sewage, the number of deaths annually from typhoid fever has been high in Trenton. The deaths and death rate for the past decade is shown in Table 9. The lowest rate for this period was 26.2 (per hundred thousand population) the highest 84.3, and the average for the ten years from 1902 to 1911 inclusive is 49.7. As compared with these figures let us note the typhoid rates in the larger New Jersey cities for the single year of 1910, (see Table 10). Trenton heads the list, and with the exception of Elizabeth which uses a small amount of untreated Elizabeth River water, Trenton is the only city depending solely upon an untreated polluted river water. Newark's supply is from a practically uninhabited watershed.

A peculiarly unfortunate feature of the Trenton typhoid situation has been the fact that many residents of Trenton, including city

TABLE 9.

TYPHOID MORTALITY IN TRENTON, NEW JERSEY. 1901 to 1911, INC.

	Population.	*Typhoid Deaths.*	*Typhoid Death Rate.* (*Per* 100,000.)
1902	77,200	29	37.6
1903	79,400	45	56.7
1904	81,700	36	44.0
1905	84,100	22	26.2
1906	86,500	34	39.3
1907	89,000	75	84.3
1908	91,600	50	54.6
1909	94,200	53	56.2
1910	96,815	50	51.7
1911	99,500	46	46.2

(Population for inter-census years estimated.)

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CHART II.

DISTRIBUTION OF TRENTON TYPHOID CASES BY WARDS. (Oct. 1910 - Nov. 1911)

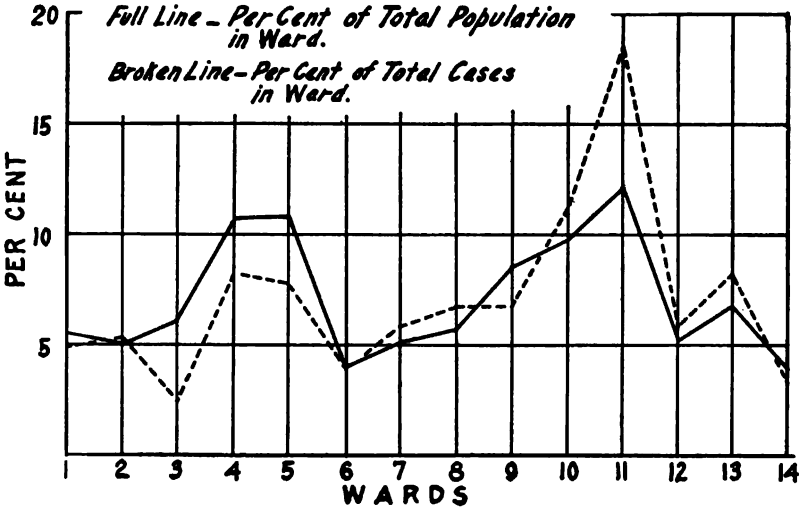
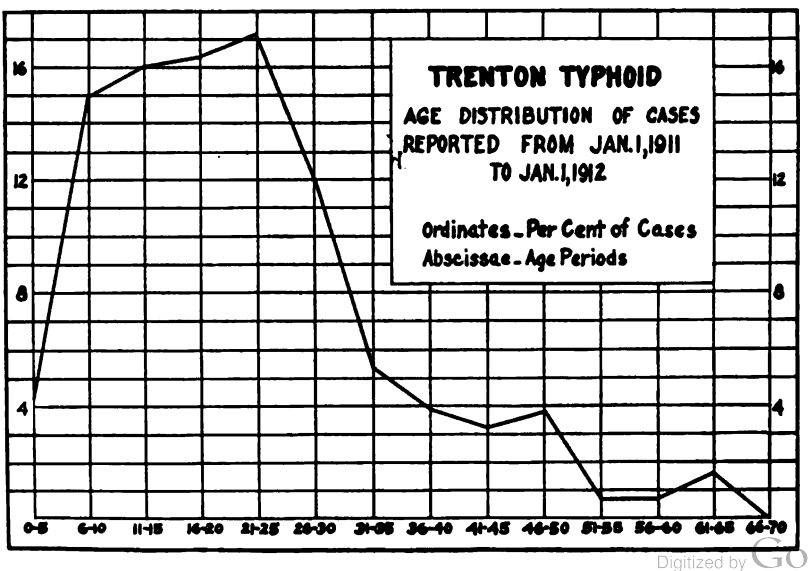


CHART III.



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TABLE 10.

TYPHOID DEATH RATE IN NEW JERSEY CITIES FOR THE YEAR 1910.

City	*Population*	*Typhoid Deaths.*	*Typhoid Death Rate (Per 100,000)*	*Water Supply.*
Trenton	96,815	50	51.7	Surface, untreated
Elizabeth	73,409	14	19.1	Surface, treated, and ground supply
Hoboken	70,324	12	17.1	Surface, treated
Camden	94,538	15	15.9	Driven wells
Newark	347,469	51	14.7	Surface, untreated
Jersey City	267,779	31	11.6	Surface, treated
Paterson	125,600	10	8.0	Surface, treated

officials, physicians, and other representative citizens, have been unwilling to believe that the water supply was the cause of the trouble, and undoubtedly it has been due to this feeling that steps to remedy the situation have been so long delayed.

In answer to the query—what is there to show that the high typhoid in Trenton has been due to the water supply and not to milk or other causes?—we can say that in the first place the typhoid cases in Trenton have been spread over the entire city, suggesting a causal agent common to everyone. No other article of food or drink thus reaches so many people from one source. That the number of typhoid cases in any section of the city has been proportionate to the number of people living in that section is indicated in Chart II.

Typhoid fever has been endemic in Trenton, cases occurring all the year around. This persistency of the cases with occasional outbreaks coming on gradually, and gradually receding, further indicates water-borne infection.

The disease has not been confined to any particular age-group of people, but has extended to all ages, the bulk of the cases being people between the ages of 10 and 30, (see Chart III). In a milk-borne epidemic more of the cases would be among young children.

To demonstrate what little bearing that milk had on the Trenton typhoid during the last epidemic, reference is made to Table 11, which shows that from October 31, 1911, to January 1, 1912, there were 314 cases of typhoid distributed on the milk routes of 83 dif-

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TABLE 11.

DISTRIBUTION OF TYPHOID CASES IN TRENTON ON MILK ROUTES FOR THE FOURTEEN MONTHS FROM OCTOBER 31, 1910, TO JANUARY 1, 1912.

Number of cases	314
Number of milkmen concerned	83
Number of milkmen with 10 or more cases	4
Number of milkmen with from 5 to 9 cases inclusive	6
Number of milkmen with less than 5 cases	73

HIGH NUMBER OF CASES DISTRIBUTED AS FOLLOWS:

Largest dealer	34 cases
Condensed milk	46 cases
No milk at all	18 cases

ferent dealers. One distributor did have 34 of these cases, but his is by far the largest milk route in the city.

As to the likelihood of any causes, other than those mentioned, being responsible for the typhoid in Trenton, it is most improbable, for no single agent operates so extensively. We may thus conclude that the typhoid in Trenton has had all the ear marks of waterbourne infection. With suspicion directed toward the water, let us next inquire whether the water is infectious. Obviously it is, for many cities and towns in New Jersey and Pennsylvania are emptying sewage into the Delaware River above Trenton's intake, and epidemics in Trenton have followed shortly after outbreaks in the cities on the Delaware watershed.

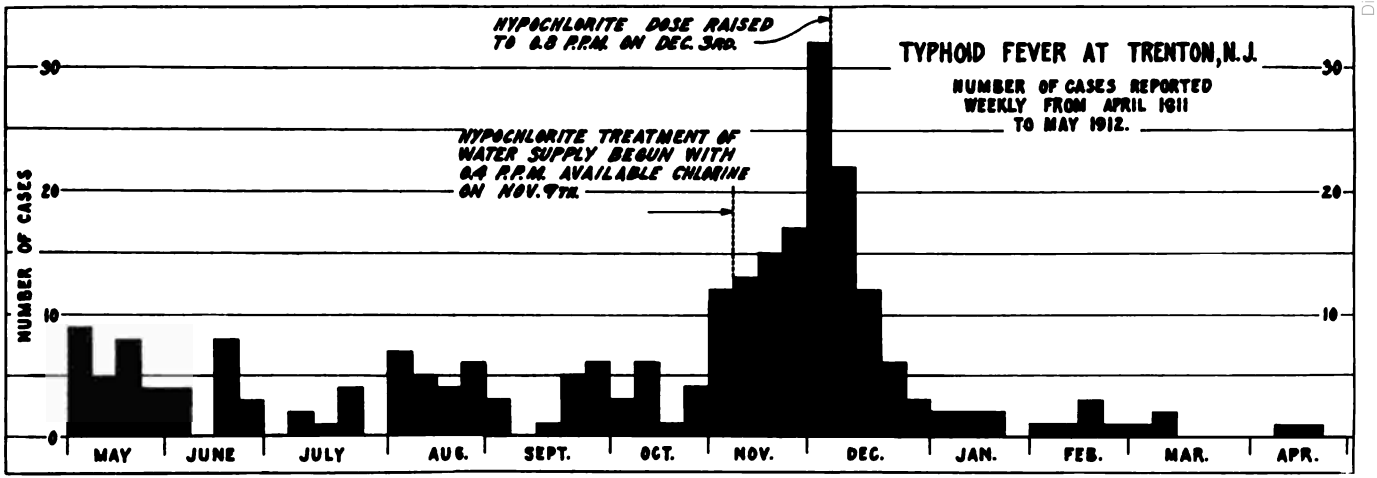
Finally, to complete our case against the Delaware River as the cause of Trenton's typhoid, attention is called to the decrease in typhoid upon the introduction of the hypochlorite treatment, other conditions having remained the same. If people have ceased to drink city water and have used bottled waters after the 1911 epidemic, then they undoubtedly did the same thing after the 1907 epidemic. No change was made in the water supply in 1908 and the typhoid continued. A change has been inaugurated in 1912 and the typhoid has diminished.

In Chart IV there is given a graphic representation of the amount of typhoid in Trenton preceding and following the hypochlorite treatment.

The occurrence of typhoid in the year 1912, as compared with that in the preceding four years, is pictured in Chart V. The increase

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CHART IV.

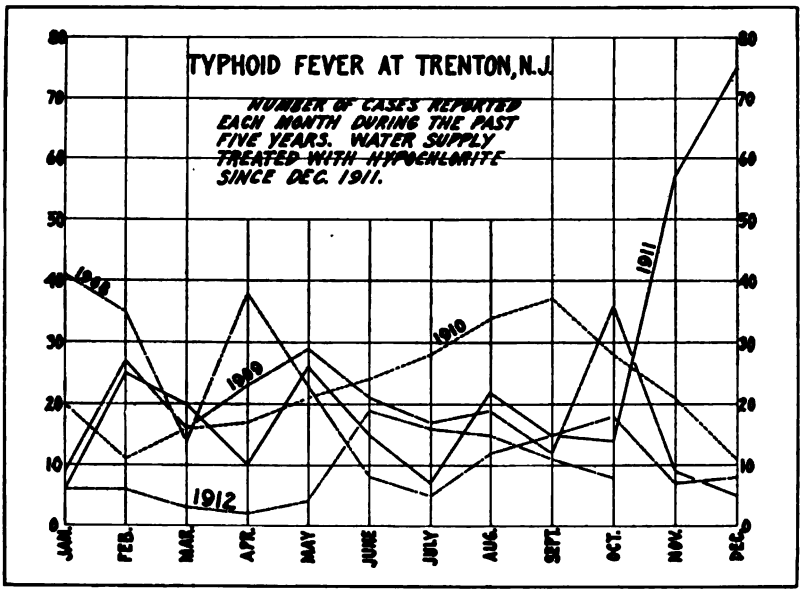


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CHART V.



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for June, 1912, following the low rate for the first part of the year, was, according to Dr. A. S. Fell, City Health Officer, due apparently to a small milk-bourne outbreak, ten cases being on the same milk route and most of them located within a few blocks of each other.

Sufficient data is not at hand to explain the higher rate during July and August. With reports for ten months at hand it is significant to note the remarkably low position of the 1912 curve. It is too early now to compare death rates and furthermore the year 1912 would be unfavorably affected by the December, 1911, epidemic, but nevertheless the number of typhoid deaths reported for the first ten months of the last five years at least places the past year in a favorable position.

1908	45
1909	30
1910	43
1911	31
1912	32

FILTRATION OF WATER SUPPLY.

It is gratifying to be able to record that Trenton is now unwilling to rest upon the good results already attained by the hypochlorite treatment and intends to have a more permanent, more reliable, and better adapted methods of water purification. Plans for a rapid sand filtration plant have been drawn up and have been approved by the State Board of Health, and as the contract has already been let it is probable that the city will be receiving filtered water before 1914.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Absecon	June 20, 1912	Tap
Allenhurst	Nov. 20, 1911	Tap, raw water, lime added
Allenhurst	Nov. 20, 1911	Tap, filtered water
Allenhurst	Feb. 14, 1912	Tap, raw water, lime added
Allenhurst	Feb. 14, 1912	Tap, filtered water
Allenhurst	May 9, 1912	Tap, raw water, lime added
Allenhurst	May 9, 1912	Tap, filtered water
Allenhurst	June 4, 1912	New well No. 1
Allenhurst	June 4, 1912	New well No. 1
Allenhurst	June 4, 1912	Morrow well
Allenhurst	June 4, 1912	Dean well
Allenhurst	June 4, 1912	Tap, raw water, lime added
Allenhurst	June 4, 1912	Tap, filtered water
Allenhurst	Aug. 8, 1912	Tap, raw water, lime added
Allenhurst	Aug. 8, 1912	Tap, filtered water
Allentown	Jan. 9, 1912	Raw water
Allentown	Jan. 9, 1912	Tap, filtered water
Allentown	April 13, 1912	Raw water
Allentown	April 13, 1912	Tap, filtered water
Allentown	July 26, 1912	Raw water
Allentown	July 27, 1912	Tap, filtered water
Allentown	Aug. 3, 1912	Raw water
Allentown	Aug. 3, 1912	Tap, filtered water
Allentown	Sept. 23, 1912	Raw water
Allentown	Sept. 23, 1912	Tap, filtered water
Allentown	Oct. 10, 1912	Raw water
Allentown	Oct. 10, 1912	Tap

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia.	Nitrites.	Nitrates.					
0	0	0	....	....	.030	.074	.001	.00	8.0	.0	....	...	Absent.
0	2-e	*	133	117	....	...	.006	.00	2.0	70.0	....	1.0	Absent.
0	0	0	121	108	....	...	.005	.00	2.0	73.0	....	0.0	Absent.
0	0	0	....	....	.074	.056	.005	.00	2.5	.....	....	...	Absent.
0	0	0	....	....	.018	.038	.002	.00	2.5	.....	....	...	Absent.
0	1-e	*	137	123	.056	.012	.006	.00	3.0	66.0	....	0.5	In 1.0 cc.
0	1-e	0	166	134	.016	.020	.001	.04	3.0	67.0	....	0.1	In 10.0 cc.
....	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
....	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
10	3-e	*	132	112	.090	.038	.001	.00	3.0	66.0	81.4	1.2	Absent.
10	3-e	*	148	132	.124	.026	.002	.00	3.0	61.0	72.9	2.5	Absent.
....	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
....	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	0	*	....	....	.076	.036	.007	.00	2.5	115.0	....	...	Absent.
0	0	0	....	....	.008	.018	.000	.00	2.5	117.0	....	...	Absent.
0	2-v	30	....	....	.060	.080	.003	1.00	4.5	12.0	....	...	In 1.0 cc.
0	2-v	30	....	....	.072	.110	.003	1.20	4.5	7.0	....	...	In 0.1 cc.
15	1-e	25	95	71	.042	.060	.005	2.00	5.5	5.0	....	0.7	In 1.0 cc.
10	1-e	*	50	38	.054	.020	.003	1.20	5.5	5.0	....	0.7	In 1.0 cc.
0	1-e	*	49	18	.082	.170	.005	.40	6.0	10.0	....	0.8	In 0.1 cc.
0	0	0	47	12	.050	.130	.001	.40	6.0	7.0	....	0.8	In 1.0 cc.
0	1-e	25	....	....	.036	.218	.004	.40	5.0	14.0	....	...	In 1.0 cc.
0	0	*	....	....	.034	.116	.000	.40	4.5	13.0	....	...	In 10.0 cc.
0	1-e	30	59	20	.028	.196	.004	.44	8.5	9.0	....	0.1	In 0.1 cc.
0	0	*	57	14	.076	.128	.001	.44	8.5	9.0	....	0.6	In 0.1 cc.
15	1-e	*	....	....	.048	.170	.006	.80	6.5	29.0	....	...	In 0.1 cc.
10	1-e	*	....	....	.036	.126	.001	1.00	6.5	7.0	....	...	In 1.0 cc.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Anglesea	Nov. 9, 1911	Tap
Arlington	May 28, 1912	Tap
Asbury Park	Nov. 20, 1911	Raw water, Mun. supply
Asbury Park	Nov. 20, 1911	Tap
Asbury Park	Feb. 14, 1912	Raw water, Mon. Co. Co.
Asbury Park	Feb. 14, 1912	Tap
Asbury Park	Feb. 14, 1912	Tap
Asbury Park	May 9, 1912	Raw water
Asbury Park	May 9, 1912	Tap, filtered water
Asbury Park	July 29, 1912	Raw water
Asbury Park	July 29, 1912	Tap, filtered water
Asbury Park	Aug. 8, 1912	Raw water
Asbury Park	Aug. 8, 1912	Tap, filtered water
Asbury Park	Oct. 11, 1912	Raw water, Mun. supply
Asbury Park	Oct. 11, 1912	Tap, filtered water
Atlantic City	Jan. 3, 1912	Tap
Atlantic City	Mch. 29, 1912	Driven well 100x200 feet
Atlantic City	Mch. 29, 1912	Absecon creek
Atlantic City	June 11, 1912	Tap
Atlantic City	July 5, 1912	Tap
Atlantic City	July 5, 1912	Tap
Atlantic City	July 5, 1912	Tap
Atlantic City	July 16, 1912	Surface water reservoir
Atlantic City	July 16, 1912	Suction well system
Atlantic City	July 16, 1912	Air lift wells
Atlantic City	July 16, 1912	Tap
Atlantic City	Aug. 2, 1912	Suction well system
Atlantic City	Aug. 2, 1912	Absecon creek
Atlantic City	Aug. 2, 1912	Absecon creek
Atlantic City	Aug. 2, 1912	Absecon creek
Atlantic City	Aug. 2, 1912	Intake crib in pond
Atlantic City	Aug. 2, 1912	Tap
Atlantic City	Aug. 22, 1912	Absecon creek
Atlantic City	Aug. 22, 1912	Absecon creek
Atlantic City	Aug. 22, 1912	Absecon creek
Atlantic City	Aug. 22, 1912	Absecon creek
Atlantic City	Sept. 5, 1912	Absecon creek
Atlantic City	Sept. 5, 1912	Absecon creek
Atlantic City	Oct. 28, 1912	Tap
Atlantic Highlands.	Nov. 17, 1911	Raw water
Atlantic Highlands.	Nov. 17, 1911	Tap, filtered water
Atlantic Highlands.	Feb. 15, 1912	Raw water
Atlantic Highlands.	Feb. 15, 1912	Tap, filtered water
Atlantic Highlands.	May 10, 1912	Raw water
Atlantic Highlands.	May 10, 1912	Tap, filtered water
Atlantic Highlands.	Aug. 9, 1912	Raw water
Atlantic Highlands.	Aug. 9, 1912	Tap, filtered water
Avalon	Nov. 8, 1911	Tap
Avalon	Jan. 22, 1912	New 934 ft. well No. 2
Avalon	Feb. 5, 1912	Tap

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia	Alb. Ammonia	Nitrites.	Nitrates.					
0	1-v	25	....	....	.014	.026	.004	.00	41.5	88.0	....	...	In 10.0 cc.
0	8-e	0	....	....	.018	.042	.001	.12	4.5	.....	....	...	Absent.
0	0	†	127	113	.070	0.28	.001	.00	2.5	.....	....	8.0	Absent.
0	0	*	105	87	.006	.028	.000	.00	2.5	45.0	....	0.0	Absent.
0	0	25	....	....	.018	.012	.000	00	3.0	48.0	....	...	In 10.0 cc.
0	0	0	....	....	.004	.008	.000	.00	3.0	46.0	....	...	Absent.
0	1-e	0	73	57	.050	.054	.002	.08	10.0	14.0	....	0.2	Absent.
70	2-v	0	56	23	.028	.056	.000	.28	6.0	‡	....	0.8	In 0.1 cc.
15	2-v	0	147	128	.018	.044	.000	.08	16.0	28.0	....	0.8	In 10.0 cc.
0	2-e	*	....	....	.084	.230	.002	.08	9.5	‡	....	...	In 1.0 cc.
0	0	0	....	....	.054	.048	.002	.04	14.5	11.0	....	...	Absent.
30	1-e	50	....	....	.038	.156	.001	.04	10.0	9.0	....	...	In 10.0 cc.
0	1-e	0	....	....	.040	.098	.002	.04	10.0	47.0	....	...	In 10.0 cc.
0	1-e	80	107	66	.106	.030	.001	.00	3.0	45.0	....	2.5	Absent.
0	1-e	0	95	56	.012	.014	.000	.00	3.0	44.0	....	0.0	Absent.
80	1-v	0	47	17	.014	.046	.000	.04	6.0	‡	....	0.2	In 10.0 cc.
0	0	0	....	....	.008	.006	.003	.00	8.5	2.0	9.5	...	Absent.
25	2-v	0	....	....	.008	.058	.000	.00	6.0	‡	18.2	...	In 10.0 cc.
30	1-v	*	....	....	.012	.032	.000	.04	7.0	1.0	....	...	Absent.
25	1-f	*	....	....	.084	.072	.001	.20	6.5	.....	....	...	In 1.0 cc.
0	1-f	*	....	....	.032	.066	.001	.20	7.0	.....	....	...	In 1.0 cc.
10	1-e	*	48	14	.012	.060	.002	.16	7.5	.....	....	0.0	In 10.0 cc.
...	....	.....	.....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
0	0	0	74	58	.012	.008	.002	.40	11.0	0.0	....	0.0	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
0	1-e	0	46	30	.012	.066	.000	.16	9.5	3.0	....	0.0	Absent.
50	1-e	0	....	....	.014	.112	.000	.04	6.5	2.0	....	...	In 1.0 cc.
50	1-e	0	....	....	.016	.122	.000	.04	6.5	2.0	....	...	In 0.5 cc.
50	1-e	0	....	....	0.22	.144	.000	.04	6.0	‡	....	...	In 0.5 cc.
50	1-e	0	....	....	080	.134	.000	.04	6.0	0.0	....	...	In 1.0 cc.
0	1-e	0	88	19	.010	.118	.000	.12	7.5	1.0	....	0.0	In 0.5 cc.
90	1-m	*	....	....	.044	.128	.000	.00	6.5	.....	....	...	In 0.1 cc.
90	1-m	*	....	....	.040	.108	.000	.00	6.5	.....	....	...	In 0.1 cc.
0	1-e	*	....	....	.008	.050	.000	.00	6.5	0.0	....	...	In 1.0 cc.
0	1-v	*	....	....	028	.090	.000	.00	6.6	.....	....	...	In 0.1 cc.
40	2-e	0	....	....	.010	.014	.000	.08	7.5	.....	....	...	In 10.0 cc.
30	1-e	0	....	....	.010	.022	.000	08	7.5	.....	....	...	In 0.1 cc.
0	2-v	0	36	4	.018	.074	.000	.08	8.5	2.0	....	0.0	In 0.1 cc.
0	1-e	†	81	61	.070	.046	.000	.00	1.5	23.0	....	8.0	Absent.
0	0	25	68	46	.014	.032	.000	.00	4.0	22.0	....	0.2	Absent.
0	28	45	78	54	.050	.006	.000	.00	4.0	19.0	....	5.6	Absent.
0	2-e	*	80	18	.000	.004	.000	.00	4.0	23.0	....	0.6	Absent.
50	0	40	....	....	.026	.014	.000	.00	4.0	22.0	....	...	Absent.
0	0	0	64	44	.000	.006	.000	.00	4.0	21.0	....	0.3	Absent.
0	2-e	† 50	....	....	060	.006	.000	.00	4.0	50.0	....	...	Absent.
0	1-e	0	....	....	.008	.050	.000	.00	3.5	41.0	....	...	In 10.0 cc.
0	1-e	*	190	162	.112	.020	.004	.00	30.5	85.0	....	0.0	Absent.
0	Of.	0	70	37	.260	....	.000	.00	30.0	87.0	68.6	0.3	In 0.1 cc.
0	0	0	177	142	190	.044	.005	.00	30.0	82.0	....	0.0	Absent.

* Slt. ‡ Acid. † Iron ppt.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Avalon	Mch. 12, 1912	Well No. 2
Avalon	May 20, 1912	2 wells 900 ft.
Avalon	Aug. 5, 1912	Tap water from 934 ft. well
Barnegat	Jan. 15, 1912	Tap
Barnegat	April 23, 1912	Tap
Barnegat	Oct. 17, 1912	Tap
Bartley	Nov. 8, 1911	Tap
Bartley	Feb. 1, 1912	Tap
Bartley	May 2, 1912	Tap
Basking Ridge	July 22, 1912	Pond
Basking Ridge	July 22, 1912	Tap
Bay Head	Jan. 17, 1912	Tap
Bay Head	Feb 27, 1912	Overflowing well
Bay Head	April 17, 1912	Tap
Bay Head	June 17, 1912	Tank
Bay Head	June 17, 1912	Well
Bay Head	June 17, 1912	Tap
Bay Head	July 29, 1912	Tap
Bay Head	Aug. 5, 1912	Tap
Bay Head	Oct. 22, 1912	Tap
Beach Haven	Jan. 12, 1912	Tap
Beach Haven	April 15, 1912	Tap
Beach Haven	July 29, 1912	Tap
Beach Haven	Oct. 18, 1912	Tap
Beach Haven Ter.	April 15, 1912	Tap
Beach Haven Ter.	July 29, 1912	Tap
Beach Haven Ter.	Oct. 17, 1912	Tap
Belmar	Nov. 20. 1911	Tap
Belmar	Feb. 14, 1912	Tap
Belmar	May 9, 1912	Tap
Belmar	May 16, 1912	Reservoir, water from 668 ft. wells
Belmar	June 5, 1912	Tap, 650 ft. well
Belmar	Aug. 8, 1912	Tap
Belvidere	Dec. 6, 1911	Tap, Buckhorn Springs Water Co.
Belvidere	Dec. 6, 1911	Tap, Belvidere Water Co.
Belvidere	Mch. 5, 1912	Tap, Buckhorn Springs Water Co.
Belvidere	Mch. 5, 1912	Tap, Belvidere Water Co.
Belvidere	June 6, 1912	Tap, Belvidere Water Co.
Belvidere	June 12, 1912	Tap, Buckhorn Springs Water Co.
Belvidere	Sept. 26. 1912	Tap, Buckhorn Springs Water Co.
Belvidere	Oct. 11. 1912	Tap, Belvidere Water Co.
Bergenfield	May 20, 1912	Tap
Bernardsville	Dec. 7, 1911	Tap
Bernardsville	Mch. 8, 1912	Tap
Bernardsville	June 4, 1912	Tap
Bernardsville	June 28, 1912	Reservoir
Bernardsville	June 28, 1912	Reservoir
Bernardsville	Aug. 16, 1912	Tap
Bernardsville	Sept. 27, 1912	Tap
Bernardsville	Sept. 30, 1912	Tap

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.	Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
0	0	0	220	200	.210	.026	003	.00	36.0	76.0	....	0.0	Absent.
0	0	0	....	....	.200	.030	005	.00	34.0	.....	....	....	Absent.
0	1-e	0	....	....	.228	.058	.000	.00	36.5	.....	....	....	Absent.
0	0	0	51	39	.010	.018	000	.00	6.5	00.0	....	0.2	Absent.
0	1-e	*	38	25	.006	.018	.000	.00	7.5	8.0	....	0.3	Absent.
0	1-e	0	....	....	.008	.012	001	.00	7.5	‡	....	....	Absent.
0	0	0	....	....	.026	.038	002	.60	2.5	14.0	....	....	Absent.
0	....	0	26	14	.014	.016	000	.20	3.5	34.0	....	0.4	Absent.
0	0	0	24	17	.014	.014	000	.16	3.0	13.0	....	0.2	Absent.
0	2-e	25	134	96	.088	.116	005	.12	3.5	26.0	....	6.5	In 0.1 cc.
0	2-e	25	96	58	.132	.100	005	.08	4.0	27.0	....	2.2	In 0.1 cc.
0	0	0	....	....	.014	.038	.004	.08	2.5	.....	....	....	In 1.0 cc.
....	....	.....	....	....	....	....	....	....	....	.....	....	....	Absent.
0	0	0	154	128	.036	.058	.001	.12	2.5	87.0	....	0.4	In 10.0 cc.
0	0	0	....	....	.080	.030	.003	.08	2.0	89.0	....	....	Absent.
0	0	0	....	....	.380	.034	.000	.00	2.0	89.0	....	....	Absent.
0	0	0	....	....	.316	.028	.012	.12	2.5	90.0	....	....	Absent.
0	1-e	0	....	....	.074	.026	.010	.08	3.0	84.0	....	....	In 10.0 cc.
....	....	.....	....	....	....	....	....	....	....	.....	....	....	In 10.0 cc.
0	1-e	0	129	77	.076	.014	.000	.08	3.0	91.0	....	0.0	In 1.0 cc.
0	1-e	25	....	....	.018	.020	.001	.00	3.5	19.0	....	....	Absent.
0	0	0	80	68	.000	.008	.000	.00	5.0	18.0	....	0.3	Absent.
0	1-e	25	67	14	.054	.028	000	.00	4.0	15.0	....	2.8	Absent.
0	1-e	*	....	....	.012	.012	.002	.04	5.0	13.0	....	....	Absent.
0	1-e	*	....	....	.014	.016	.000	.00	4.5	.....	....	....	Absent.
0	0	*	....	....	.043	.060	.000	.00	5.0	6.0	....	....	Absent.
0	2-e	40	....	....	.036	008	001	.04	5.0	7.0	....	....	In 10.0 cc.
0	0	*	105	92	.010	.014	.001	.08	2.0	71.0	....	0.4	Absent.
0	1-e	*	120	25	.046	.018	.004	.00	2.5	71.0	....	0.4	Absent.
0	0	*	112	98	.030	.014	.000	.00	2.0	70.0	....	0.3	In 1.0 cc.
0	0	*	....	....	.106	.020	.003	.00	2.0	.....	....	....	In 1.0 cc.
0	0	0	....	....	.032	.012	017	.08	2.5	.....	....	....	Absent.
0	1-e	0	....	....	.146	.060	.004	.00	3.0	111.0	....	....	In 10.0 cc.
0	0	0	50	32	.018	.034	.000	.04	2.5	.....	....	0.1	Absent.
0	0	0	62	54	.018	.066	.000	.04	2.5	.....	....	0.2	In 10.0 cc.
0	1-e	0	41	32	.000	.016	.004	.00	2.5	11.0	....	0.0	In 10.0 cc.
10	1-v	*	47	35	.022	052	.003	.04	2.5	10.0	....	0.0	In 10.0 cc.
0	0	0	50	38	.004	.046	.000	.04	2.0	18.0	....	0.1	In 1.0 cc.
0	0	0	43	25	.002	.028	.000	.00	2.5	12.0	....	0.0	In 10.0 cc.
0	1-e	*	61	38	.024	.074	.000	.00	3.0	14.0	....	0.0	In 1.0 cc.
0	1-e	*	....	....	.028	.136	.000	.00	2.5	22.0	....	....	In 0.1 cc.
0	1-e	0	....	....	.012	.046	.000	.00	5.5	.....	....	....	Absent.
0	0	*	77	62	.020	.038	.002	.24	4.5	23.0	....	0.3	In 10.0 cc.
0	0	25	84	52	.040	.032	.005	.00	4.0	18.0	....	0.0	In 1.0 cc.
20	0	*	68	38	.010	.046	.004	.20	3.5	26.0	....	0.6	In 0.1 cc.
0	1-e	*	....	....	.040	.090	.001	.08	4.0	22.0	....	....	In 10.0 cc.
0	0	0	....	....	.016	.050	.001	.00	2.5	24.0	....	....	In 10.0 cc.
0	0	*	....	....	.048	.122	.010	.16	5.5	.....	....	....	In 1.0 cc.
0	1-e	40	....	....	.060	.134	.002	.00	6.0	.....	....	....	In 0.1 cc.
25	1-v	25	80	46	.042	.120	.003	.08	4.5	26.0	....	0.2	In 0.1 cc.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Beverly	Jan. 2, 1912	Tap
Beverly	April 10, 1912	Tap
Beverly	July 11, 1912	Tap
Blackwood	Nov. 18, 1911	Tap
Blackwood	Feb. 20, 1912	Tap
Blackwood	May 21, 1912	Tap
Blackwood	Aug. 9, 1912	Tap
Blairstown	Dec. 4, 1911	Tap
Blairstown	Mch. 14, 1912	Tap
Blairstown	Sept. 27, 1912	Tap
Bloomfield	May 18, 1912	Tap
Bloomfield	July 24, 1912	Tap
Bloomfield	Aug. 21, 1912	Tap
Bloomfield	Aug. 30, 1912	Tap
Bloomfield	Sept. 16, 1912	Tap
Bloomsbury	Dec. 14, 1911	Tap
Bloomsbury	Mch. 25, 1912	Tap
Bloomsbury	June 18, 1912	Tap
Bloomsbury	July 8, 1912	Reservoir
Bloomsbury	July 28, 1912	Stream
Bloomsbury	Sept. 19, 1912	Tap
Bogota	Jan. 3, 1912	Tap
Bogota	April 1, 1912	Tap
Bogota	July 17, 1912	Tap
Boonton	Dec. 2, 1911	Tap
Boonton	Mch. 5, 1912	Tap
Boonton	June 4, 1912	Tap
Boonton	Sept. 24, 1912	Tap
Bordentown	Jan. 9, 1912	Tap
Bordentown	April 11, 1912	Tap
Bordentown	July 11, 1912	Tap
Bordentown	Oct. 9, 1912	Tap
Bound Brook	Nov. 13, 1911	Tap, well water
Bound Brook	Nov. 13, 1911	Tap, well water
Bound Brook	Jan. 11, 1912	Tap
Bound Brook	Feb. 6, 1912	Tap, well water
Bound Brook	Feb. 6, 1912	Tap, well water
Bound Brook	April 12, 1912	Tap
Bound Brook	May 22, 1912	Tap
Bound Brook	May 22, 1912	Tap
Bound Brook	July 20, 1912	Tap
Bound Brook	Oct. 8, 1912	Tap
Bradley Beach	May 9, 1912	Tap
Branchville	Dec. 5, 1911	Tap
Branchville	Mch. 6, 1912	Tap
Branchville	June 6, 1912	Tap
Branchville	Sept. 28, 1912	Tap
Brant Beach	April 15, 1912	Tap
Brant Beach	July 29, 1912	Tap
Brant Beach	Oct. 18, 1912	Tap

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Total Solids.	Mineral Residue.	Color.	Odor, Cold.	Turbidity.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
0	1–e		0	112	62	.026	.030	.003	2.40	17.0	8.0	....	0.1	Absent.
0	0		0	124	70	.004	.006	.000	4.60	17.5	7.0	....	0.0	Absent.
0	0		0	....	....	.010	.026	.002	2.80	14.5	7.0	....	...	Absent.
40	1–v	*		56	40	.010	.072	.000	.24	4.5	15.0	....	1.1	In 1.0 cc.
0	2–e	*		52	48	.070	.098	.008	.24	4.0	8.0	....	0.6	In 1.0 cc.
25	0	*		56	22	.024	.094	.004	.12	3.5	11.0	....	0.5	In 10.0 cc.
30	1–e	*		....	....	.050	.140	.000	.24	4.5	18.0	....	...	In 1.0 cc.
0	0		0	256	248	.040	.020	.006	.00	5.0	198.0	....	0.1	
0	0		0	278	228	.006	.012	.003	....	5.5	188.0	....	0.8	Absent.
0	1–v	*		257	212	.040	.052	.001	.00	5.0	190.0	....	0.0	Absent.
0	0		0	....	....	.014	.034	.000	.08	4.0	.....	....	...	Absent.
0	0		0	....	....	.082	.100	.001	0.80	9.0	37.0	....	...	In 10.0 cc.
0	0		0	....	....	.022	.102	.000	.16	8.0	.....	....	...	In 1.0 cc.
0	1–e		0	....	....	.038	.094	.000	.20	8.5	40.0	....	...	In 10.0 cc.
0	1–e	*		....	....	.038	.116	.000	.20	10.5	.....	....	...	In 20.0 cc.
0	0	*		....	....	010.	016	.000	2.40	4.5	26.0	....	...	Absent.
0	3–e	*		....	....	.028	.054	.004	.48	3.0	13.0	....	...	Absent.
0	0	*		....	....	.008	.028	.000	.00	4.0	28.0	....	...	In 1.0 cc.
...	....	.....		....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....		....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
0	0		0	97	62	.028	.060	.000	1.00	5.0	51.0	....	0.0	In 0.1 cc.
0	0		0	227	185	.004	.018	000	2.00	9.0	73.0	....	0.1	Absent.
0	0		0	227	180	.012	.060	.001	2.40	9.5	69.0	....	0.0	Absent.
0	3–v		0	245	188	.028	.016	.000	1.80	9.0	76.0	....	0.0	In 10.0 cc.
0	1–e	*		57	37	.010	.054	.001	.28	8.5	26.0	....	...	Absent.
0	1–e		0	53	39	.018	.026	.004	.00	3.5	12.0	....	0.0	Absent.
0	0		0	23	14	.004	.054	.002	.08	2.5	8.0	....	0.2	In 10.0 cc.
0	0	*		32	7	.036	.114	.000	.08	5.0	10.0	....	0.1	In 0.1 cc.
0	1–e		0	98	30	.012	.024	.000	1.20	45	10.0	....	0.0	Absent.
0	0		0	80	49	.020	.018	.000	2.00	5.0	2.0	....	0.0	Absent.
0	0		0	....	....	.040	.040	.002	2.40	6.0	‡	....	...	Absent.
10	1–e		0	52	15	.060	.024	.002	2.40	5.5	1.0	....	...	Absent.
10	0	*		554	497	.016	.026	.000	.32	14.0	90.0	....	0.6	Absent.
0	0		0	466	416	.018	.034	.000	.28	13.0	67.0	....	0.4	Absent.
0	1–e		0	190	102	.032	.070	.002	.20	4.5	19.0	....	0.0	In 1.0 cc.
0	0		0	....	....	.000	.020	.002	.00	12.5	85.0	....	...	In 10.0 cc.
0	0		0	....	....	.004	.026	.002	.00	10.0	134.0	....	...	Absent.
0	1–e	*		77	54	.012	.042	.003	.28	4.5	20.0	....	0.5	Absent.
0	0		0	....	....	.016	.070	.005	.04	4.5	33.0	....	...	In 10.0 cc.
0	0		0	....	....	.036	.068	.007	.04	4.5	37.0	....	...	In 10.0 cc.
50	1–e	100		....	....	.038	.104	.001	.24	5.0	60.0	....	...	In 0.1 cc.
0	1–e	*		....	....	.018	.088	.000	.00	5.5	49.0	....	...	In 1.0 cc.
0	1–e		0	144	116	.000	.012	.003	.04	3.5	66.0	....	0.4	Absent.
10	0	*		103	76	.022	.060	.000	.08	2.0	17.0	....	0.2	Absent.
0	0	*		58	40	.072	.112	.000	.00	2.0	10.0	....	0.4	In 10.0 cc.
30	1–v	*		66	31	.012	.084	.000	.00	1.5	15.0	....	0.8	In 0.1 cc.
30	2–e	*		....	....	.030	.180	.000	.08	3.0	.....	....	...	In 1.0 cc.
0	0		0	80	60	.030	.018	.000	.00	5.0	11.0	....	1.0	Absent.
0	1–e	*		....	....	050	.072	.000	.00	5.0	11.0	....	...	Absent.
0	1–e		0	....	....	.036	.012	.001	.04	5.0	15.0	....	...	Absent.

* Slt.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Bridgeton	Jan 4, 1912	Tap
Bridgeton	April 13, 1912	Tap
Bridgeton	July 2, 1912	Tap
Bridgeton	July 24, 1912	Tap
Bridgeton	Oct. 21, 1912	Tap
Brown's Mills	Dec. 15, 1911	Tap
Brown's Mills	Mch. 20, 1912	Tap
Brown's Mills	June 18, 1912	Tap
Brown's Mills	Sept. 10, 1912	Tap
Brown's Mills	Sept. 20, 1912	Driven well
Burlington	Jan. 2, 1912	Raw water
Burlington	Jan. 2, 1912	Tap, filtered water
Burlington	Jan. 22, 1912	Raw water
Burlington	Jan. 22, 1912	Tap, filtered water
Burlington	April 10, 1912	Raw water
Burlington	April 10, 1912	Tap, filtered water
Burlington	April 25, 1912	Raw water
Burlington	April 25, 1912	Tap, filtered water
Burlington	July 11, 1912	Raw water
Burlington	July 11, 1912	Tap, filtered water
Burlington	Aug. 2, 1912	Raw water
Burlington	Aug. 2, 1912	Tap, filtered water
Burlington	Sept. 5, 1912	Raw water
Burlington	Sept. 5, 1912	Tap, filtered water
Burlington	Oct. 10, 1912	Raw water
Burlington	Oct. 10, 1912	Tap
Butler	Dec. 8, 1911	Tap
Butler	Mch. 7, 1912	Tap
Butler	June 10, 1912	Tap
Butler	July 2, 1912	Stream
Butler	July 2, 1912	Stream
Butler	July 2, 1912	Reservoir
Butler	July 2, 1912	Tap
Butler	Oct. 2, 1912	Tap
Caldwell	May 9, 1912	Tap
Caldwell	May 21, 1912	Tap
Caldwell	May 28, 1912	Tap
Caldwell	May 28, 1912	Tap
Caldwell	June 5, 1912	Tap
Caldwell	Oct. 9, 1912	Tap
Camden	Nov. 11, 1911	Tap, Mun. supply
Camden	Nov. 11, 1911	Tap, Stockton Water Co.
Camden	Feb. 16, 1912	Tap, Mun. supply
Camden	Feb. 16, 1912	Tap, Stockton Water Co.
Camden	Mch. 6, 1912	Tap, Stockton Water Co.
Camden	May 24, 1912	Tap, Stockton Water Co.
Camden	May 24, 1912	Tap, Mun. supply
Camden	Aug. 10, 1912	Tap, Mun. supply
Camden	Aug. 10, 1912	Tap, Stockton Water Co.
Cape May	Nov. 9, 1911	Tap

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
0	1-e	*	....	....	.078	.058	.003	1.60	9.0	110.0	....	...	Absent.
0	0	*	....	....	.064	.024	.002	.00	9.0	4.0	....	...	Absent.
0	1-e	*	....	....	.092	.046	.005	.60	7.5	6.0	....	..	In 10.0 cc.
15	1-e	*	....	....	.042	.036	.001	1.32	6.5	.....	....	...	In 10.0 cc.
0	2-e	*	....	....	.088	.054	.001	.80	9.0	6.0	....	...	Absent.
0	2-e	*	....	....	.260	.040	.000	.00	3.5	81.0	....	...	Absent.
0	0	0	110	90	.190	.026	.000	.00	4.0	81.0	....	...	Absent.
0	0	0	114	94	.314	.044	.016	.00	2.5	94.0	....	0.4	Absent.
0	Dis.	*	....	....	134	.076	.000	.00	5.0	91.0	....	...	Absent.
0	0	0	....	....	.242	.034	.002	.04	3.5	.....	....	...	Absent.
0	1-e	30	73	43	.054	.094	.002	.20	2.0	20.0	....	0.7	In 0.1 cc.
0	1-e	0	45	25	.040	.074	.001	.16	2.0	3.0	....	0.2	Absent.
0	1-e	40	....	....	....	....	....	....	....	17.0	....	...	In 0.1 cc.
0	1-e	0	....	....	....	....	....	....	....	7.0	....	...	Absent.
0	1-e	25	64	34	.028	.070	.003	.28	8.0	9.0	....	0.6	In 0.1 cc.
0	1-e	*	124	68	.022	.046	.000	.20	3.0	5.0	....	0.5	In 10.0 cc.
0	1-e	0	60	40	.036	.022	.000	.16	3.5	5.0	....	0.1	Absent.
0	1-e	0	45	33	.044	.030	.000	.16	3.5	5.0	....	0.0	Absent.
0	1-e	25	....	....	.060	.110	.011	.12	6.5	46.0	....	...	In 0.1 cc.
0	0	0	....	....	.028	.074	.002	.12	7.5	43.0	....	...	In 10.0 cc.
0	1-e	*	101	72	.034	.206	.006	.04	5.0	38.0	....	0.3	In 0.1 cc.
0	1-e	0	88	60	.018	.096	.000	.12	5.5	37.0	....	0.0	In 10.0 cc.
0	2-e	*	93	56	.110	.144	.006	.08	6.0	51.0	....	0.4	In 0.1 cc.
0	1-e	0	93	57	.034	.064	.001	.08	7.0	46.0	....	0.0	In 10.0 cc.
20	2-e	*	....	....	.060	.136	.007	.24	4.5	22.0	....	...	In 1.0 cc.
0	1-e	0	....	....	.040	.104	.001	.28	4.5	15.0	....	...	Absent.
0	0	0	50	27	.006	.034	.000	.00	3.0	.....	....	0.5	
0	0	0	62	44	.000	.044	.000	.00	3.5	11.0	....	0.0	Absent.
15	0	0	52	30	.014	.076	.000	.00	2.0	14.0	....	0.4	In 0.1 cc.
0	1-e	0	....	....	.016	.060	.002	.08	3.0	23.0	....	...	In 0.1 cc.
0	1-e	0	42	14	.034	.100	.002	.08	3.0	18.0	....	0.2	In 0.1 cc.
25	1-e	0	48	28	.058	.110	.000	.00	3.5	16.0	....	0.2	In 0.1 cc.
0	1-e	0	32	12	.044	.100	.001	.00	3.5	18.0	....	0.0	In 0.1 cc.
20	2-e	*	49	21	.028	.120	.000	.12	2.5	15.0	....	0.2	In 1.0 cc.
0	0	0	....	....	.010	.020	.000	.16	3.5	.....	....	...	In 10.0 cc.
0	1-e	0	153	123	.006	.020	.001	2.00	9.5	64.0	....	0.0	In 10.0 cc.
0	0	0	98	85	.008	.024	.002	.28	6.5	48.0	....	0.0	Absent.
0	0	0	....	....	.010	.016	.001	.20	6.5	48.0	....	...	In 10.0 cc.
0	0	0	....	....	.012	.016	.000	.28	5.5	.....	....	...	Absent.
20	0	0	96	68	.034	.018	.000	.20	6.0	52.0	....	...	Absent.
0	0	0	65	48	.018	.026	.000	2.20	5.0	16.0	....	0.5	Absent.
0	1-e	*	68	48	.072	.040	.000	3.20	8.0	8.0	....	0.4	Absent.
0	0	0	60	34	.042	.024	.002	2.20	8.0	12.0	....	0.2	Absent.
0	0	0	40	22	.124	.064	.002	2.80	8.5	2.0	....	0.2	In 10.0 cc.
10	0	0	82	32	.190	.042	.000	.40	8.0	2.0	....	0.0	Absent.
0	0	0	....	....	.100	.006	.001	3.20	8.0	6.0	26.0	...	Absent.
0	0	0	....	....	.010	.004	.001	2.40	5.0	16.0	45.7	...	Absent.
0	1-e	0	....	....	.070	.060	.020	2.00	5.5	58.0	....	...	Absent.
0	0	0	....	....	.118	.050	.001	3.60	8.5	8.0	....	...	Absent.
0	0	*	....	....	.200	.036	.003	.00	19.2	7.0	....	...	Absent.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC
Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Cape May	Feb. 6, 1912	Tap
Cape May	Mch. 8, 1912	Tap
Cape May	Mch. 8, 1912	Tap
Cape May	May 22, 1912	Tap
Cape May	Aug. 5, 1912	Tap
Cape May Point	Nov. 9, 1911	Tap
Cape May Point	Feb. 6, 1912	Tap
Cape May Point	May 22, 1912	Tap
Cape May Point	Aug. 5, 1912	Tap
Chatham	Nov. 6, 1911	Tap
Chatham	Feb. 5, 1912	Tap
Chatham	May 1, 1912	Tap
Chatham	Aug. 26, 1912	Tap
Chrome	May 27, 1912	Tap
Clarksboro	Dec. 1, 1911	Tap
Clarksboro	Mch. 20, 1912	Tap
Clarksboro	June 20, 1912	Tap
Clarksboro	Aug. 16, 1912	Tap
Clarksboro	Aug. 29, 1912	Tap
Clarksboro	Sept. 5, 1912	Tap
Clemonton	Dec. 2, 1911	Tap
Clemonton	Feb. 13, 1912	Tap, well 165 ft.
Clemonton	Feb. 13, 1912	Reservoir, water from spring
Clemonton	Mch. 22, 1912	Tap
Clemonton	June 19, 1912	Tap
Clemonton	June 19, 1912	Spring
Clemonton	Sept. 4, 1912	Tap, well water
Clemonton	Sept. 10, 1912	Spring
Clemonton	Sept. 10, 1912	Wells
Clinton	Dec. 2, 1911	Tap
Clinton	Mch. 18, 1912	Tap
Clinton	June 11, 1912	Tap
Clinton	Sept. 26, 1912	Tap
Collingswood	Aug 20, 1912	Tap
Columbus	Nov. 22, 1911	Tap
Columbus	Feb. 2, 1912	Tap
Columbus	May 6, 1912	Tap
Columbus	Aug. 3, 1912	Tap
Corson's Inlet	Nov. 8, 1911	Tap
Corson's Inlet	Aug. 6, 1912	Tap
Cranbury	Nov. 21, 1911	Tap
Cranbury	Feb. 1, 1912	Tap
Cranbury	Feb. 1, 1912	Tap
Cranbury	Feb. 16, 1912	Tap
Cranbury	Feb. 16, 1912	Well
Cranbury	May 7, 1912	Tap
Cranbury	Aug. 15, 1912	Tap
Cranbury	Aug. 29, 1912	Well
Cranbury	Sept. 5, 1912	Tap
Crosswick	May 6, 1912	Tap

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia.	Nitrites.	Nitrates.					
0	0	0	160	147	.160	.084	.004	.00	20.5	64.0	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	0	0	164	130	.140	.024	.003	.00	22.5	68.0	....	0.0	Absent.
0	1-e	0	....	....	070	.086	.008	.08	99.0	156.0	....	...	In 10.0 cc.
25	1-v	*	....	....	.190	.088	.007	.60	85.0	85.0	....	...	In 1.0 cc.
0	0	0	413	386	.200	.044	.005	.00	82.0	86.0	....	...	In 10.0 cc.
0	2-m	*	324	264	.310	.060	.300	.64	23.0	44.0	....	4.0	Absent.
0	1-e	0	....	....	.008	.060	.001	.08	90.0	169.0	....	...	In 10.0 cc.
0	0	0	117	94	.010	.026	.002	1.20	4.0	67.0	....	0.1	Absent.
0	0	0	131	108	.008	.036	.000	.00	5.5	66.0	....	...	Absent.
0	0	0	120	109	.004	.006	.001	.80	5.5	67.0	....	0.0	Absent.
0	1-e	0	109	100	.012	.048	.001	1.00	6.0	99.0	....	0.0	Absent.
0	1-e	0	....	....	.016	.076	.001	.08	4.0	17.0	....	...	Absent.
0	0	0	285	268	.046	.034	.003	.00	38.0	18.0	....	...	Absent.
0	0	0	284	212	.014	.034	.000	.00	37.5	171.0	....	0.4	Absent.
0	0	0	311	209	.080	.060	.003	.08	38.0	176.0	....	0.3	In 1.0 cc.
0	0	*	....	....	.514	.088	.052	8.00	56.5	34.0	....	...	In 1.0 cc.
0	1-e	*	....	....	.222	.080	.150	8.00	50.0	48.0	....	...	In 0.1 cc.
0	1-v	*	302	62	.014	.008	.006	.00	40.0	191.0	....	...	In 1.0 cc.
40	2-v	30	58	34	.014	.034	.000	.00	3.0	24.0	....	...	In 0.1 cc.
0	0	0	....	....	.016	.022	.001	.00	2.5	61.0	60.0	...	Absent.
30	0	*	....	....	.018	.044	.003	.20	2.5	‡	23.4	...	Absent.
0	1-e	0	110	80	.034	.018	.000	.00	3.5	60.0	....	0.0	Absent.
0	1-e	0	103	89	.060	.044	.002	.00	3.5	63.0	....	...	Absent.
25	1-e	0	29	14	.050	.076	.003	.00	4.0	‡	....	...	In 10.0 cc.
0	0	0	....	....	.056	.032	.001	.00	5.0	71.0	....	...	Absent.
0	2-e	0	....	....	.018	.072	.000	.04	5.5	18.0	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
0	2-e	*	75	53	.008	.080	.000	.40	3.5	30.0	....	...	In 10.0 cc.
0	0	150	130	119	.028	.160	.002	.28	3.5	13.0	....	3.0	In 0.1 cc.
0	0	0	50	35	.008	.034	.001	.00	2.0	24.0	....	0.0	In 10.0 cc.
0	0	30	90	51	.044	.126	.000	.04	3.0	28.0	....	0.7	In 0.1 cc.
0	1-e	0	....	....	.010	.022	.000	.64	4.5	.....	....	...	Absent.
0	0	0	83	70	....	....	.005	.00	2.0	78.0	....	2.0	Absent.
10	....	25	56	36	.114	.020	.000	.00	3.0	80.0	....	0.4	In 10.0 cc.
5	1-e	*	....	....	.018	.018	.008	.00	2.5	78.0	....	...	Absent.
0	1-e	*	....	....	.024	.060	.001	.00	2.5	121.0	....	...	In 10.0 cc.
20	0	*	147	123	.028	.038	.020	.00	15.0	74.0	....	2.0	Absent.
0	1-e	0	....	....	.014	.090	.000	.04	16.5	112.0	....	...	In 10.0 cc.
0	1-e	*	15	10	.010	.028	.001	.04	2.5	5.0	....	0.0	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	0.1	Absent.
0	....	*	20	11	.008	.014	.000	.08	3.5	8.0	11.1	0.3	Absent.
...	....	.....	....	....	....	....	....	....	....	2.0	14.3	0.2	
...	....	.....	....	....	....	....	....	....	....	1.0	11.1	1.0	
0	0	0	....	....	.018	.018	.002	.00	3.5	1.0	....	...	Absent.
0	0	0	28	17	.032	.032	.000	.24	4.0	7.0	....	0.0	In 0.1 cc.
0	1-v	0	....	....	.010	.026	.001	.20	5.0	.....	....	...	Absent.
25	1-e	30	57	35	124	.054	.030	.04	5.5	30.0	....	1.2	Absent.
0	1-e	*	....	....	.094	.026	.007	.00	4.5	5.0	....	...	In 10.0 cc.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Crosswick	July 29, 1912	Receiving well
Crosswick	July 29, 1912	Tap
Crosswick	Aug. 3, 1912	Spring
Crosswick	Aug. 3, 1912	Spring
Crosswick	Aug. 3, 1912	Suction well
Crosswick	Aug. 3, 1912	Overflow at ram
Crosswick	Aug. 3, 1912	Tap
Deal	Nov. 18, 1911	Tap
Deal	May 9, 1912	Tap
Deal	Aug. 8, 1912	Tap
Delawanna	Jan. 3, 1912	Tap
Delawanna	April 1, 1912	Tap
Delawanna	July 17, 1912	Tap
Delawanna	Oct. 10, 1912	Tap
Demarest	July 5, 1912	Tap
Dover	Nov. 11, 1911	Tap
Dover	Nov. 15, 1911	Tap, high service
Dover	Nov. 15, 1911	Tap, low service
Dover	Feb. 1, 1912	Tap
Dover	Mch. 5, 1912	Tap
Dover	Mch. 5, 1912	Tap, high service
Dover	Mch. 13, 1912	Tap, low service
Dover	Mch. 13, 1912	Tap, low service
Dover	Mch. 13, 1912	Tap, low service
Dover	Mch. 21, 1912	Tap, mixed water
Dover	Mch. 21, 1912	Spring No. 4
Dover	Mch. 21, 1912	Spring No. 6
Dover	Mch. 27, 1912	Spring No. 1
Dover	Mch. 27, 1912	Spring No. 2
Dover	Mch. 27, 1912	Spring No. 3
Dover	Mch. 27, 1912	Spring No. 5
Dover	Mch. 27, 1912	Spring No. 7
Dover	Mch. 27, 1912	Spring No. 8
Dover	Mch. 27, 1912	Spring No. 9
Dover	Mch. 27, 1912	Spring No. 10
Dover	Mch. 27, 1912	Spring No. 11
Dover	Mch. 27, 1912	Spring No. 12
Dover	Mch. 27, 1912	Spring No. 13
Dover	Mch. 27, 1912	Spring No. 14
Dover	Mch. 27, 1912	Spring No. 15
Dover	Mch. 27, 1912	Reservoir No. 1, filtered brook water
Dover	Mch. 27, 1912	Well and spring water
Dover	April 1, 1912	Spring in park
Dover	April 1, 1912	Low service water
Dover	April 29, 1912	Spring No. 1
Dover	April 29, 1912	Spring No. 2
Dover	April 29, 1912	Spring No. 3
Dover	April 29, 1912	Spring No. 4
Dover	April 29, 1912	Spring No. 6
Dover	April 29, 1912	Spring No. 7

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
0	0	0	30	21	.006	.044	.003	2.80	5.0	0.0	....	0.1	In 1.0 cc.
0	0	0	....	....	†	.076	.002	2.60	4.5	4.0	....	...	In 10.0 cc.
...	.....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	.....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	.....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	.....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
0	0	0	....	....	.260	.086	.001	2.00	5.0	79.0	....	...	In 0.1 cc.
0	1-e	25	140	122	.006	.018	015	.00	7.5	100.0	....	0.6	Absent.
5	1-e	*	....	....	.018	.020	.008	.00	8.0	92.0	....	...	Absent.
0	0	0	....	....	.090	.064	.002	.00	7.0	148.0	....	...	In 10.0 cc.
0	0	0	158	128	.006	.020	.001	.60	5.0	76.0	....	...	Absent.
0	1-e	0	146	126	.010	.010	.002	1.20	6.5	67.0	....	0.0	Absent.
0	2-v	0	130	102	.014	.030	.000	1.04	6.0	69.0	....	0.0	Absent.
0	Dis.	*	.....	....	.022	.014	.000	1.40	6.0	75.0	....	...	Absent.
0	Dis.	25	.....	....	.044	.062	.020	.12	8.0	.....	....	...	In 1.0 cc.
0	0	25	60	47	.016	.046	.001	.60	3.5	13.0	....	0.8	In 10.0 cc.
0	0	0	....	....	.004	.026	.000	.16	5.0	.....	....	...	In 1.0 cc.
10	2-v	*	.....	....	.090	.086	.003	.00	5.0	.....	....	...	In 1.0 cc.
0	....	0	140	90	.004	.026	.000	.08	3.0	15.0	....	2.0	In 10.0 cc.
0	0	0	....	....	.010	.020	.004	.24	4.0	9.0	....	...	In 10.0 cc.
0	0	0	....	....	.006	.014	.003	.08	4.0	96.0	....	...	Absent.
0	0	110	....	....	.030	.190	.004	.48	3.0	.....	....	...	In 0.1 cc.
0	0	25	....	....	.018	.100	.004	.48	3.5	.....	....	...	In 0.1 cc.
0	0	90	....	....	.026	.164	.008	.56	3.0	.....	....	...	In 0.1 cc.
10	1-e	*	.....	....	.006	.088	.001	.80	3.5	15.0	....	...	In 1.0 cc.
0	2-e	0	....	....	.008	.028	.000	2.40	6.0	16.0	....	...	In 10.0 cc.
0	0	0	.....	....	.008	.018	.000	1.20	4.0	17.0	....	...	Absent.
0	0	0	.....	....	.010	.048	.006	.60	3.0	6.0	....	...	In 10.0 cc.
0	0	0	.....	....	.014	.012	.000	1.80	4.5	9.0	....	...	In 10.0 cc.
0	0	*	....	....	.012	.016	.000	2.00	6.5	8.0	....	...	In 10.0 cc.
0	0	0	.....	....	.016	.018	.001	1.20	4.5	10.0	....	...	Absent.
0	0	0	....	....	.024	.030	.000	1.80	4.0	15.0	....	...	Absent.
0	0	0	.....	....	.036	.016	.002	2.40	5.5	10.0	....	...	In 10.0 cc.
0	0	*	.....	....	.020	.056	.000	.60	3.5	6.0	....	...	Absent.
0	0	*	....	....	.016	.028	.003	.60	3.5	7.0	....	...	Absent.
0	0	*	....	....	.006	.012	.002	.72	4.5	11.0	....	...	Absent.
0	0	0	.....	....	.012	.014	.002	.28	3.5	12.0	....	...	Absent.
0	0	*	.....	....	.010	.024	.001	.64	4.0	6.0	....	...	In 10.0 cc.
0	0	0	.....	....	.010	.018	.000	.00	3.0	9.0	....	...	Absent.
0	0	*	.....	....	.006	.010	.002	.24	3.5	6.0	....	...	Absent.
0	0	*	....	....	.018	.078	.006	.08	2.0	7.0	....	...	In 10.0 cc.
0	0	*	.....	....	.012	.022	.001	.72	3.5	10.0	....	...	In 1.0 cc.
0	0	0	.....	....	.006	.024	.000	4.80	7.5	.....	....	...	Absent.
0	0	0	.....	....	.008	.024	.002	.92	4.5	.....	....	...	Absent.
...	.....	.....	.....	....	....	....	....	....	....	.....	....	...	Absent.
...	.....	.....	.....	....	....	....	....	....	....	.....	....	...	Absent.
...	.....	.....	.....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	.....	.....	.....	....	....	....	....	....	....	.....	....	...	Absent.
...	.....	.....	.....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	.....	.....	.....	....	....	....	....	....	....	.....	....	...	Absent.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Dover	April 29, 1912	Spring No. 8
Dover	April 29, 1912	Spring No. 9
Dover	April 29, 1912	Spring No. 10
Dover	April 29, 1912	Spring No. 11
Dover	April 29, 1912	Spring No. 12
Dover	April 29, 1912	Spring No. 14
Dover	April 29, 1912	Spring No. 15
Dover	April 29, 1912	Tap, high service
Dover	April 29, 1912	Stream to reservoir No. 2
Dover	April 29, 1912	Catch basin, springs
Dover	April 29, 1912	Pond above filter
Dover	April 29, 1912	100 ft. driven well near catch basin
Dover	May 2, 1912	Tap
Dover	June 18, 1912	Tap
Dover	July 1, 1912	Spring No. 1
Dover	July 1, 1912	Spring No. 2
Dover	July 1, 1912	Spring No. 3
Dover	July 1, 1912	Spring No. 5
Dover	July 1, 1912	Spring No. 6
Dover	July 1, 1912	Spring No. 7
Dover	July 1, 1912	Spring No. 8
Dover	July 1, 1912	Spring No. 9
Dover	July 1, 1912	Spring No. 10
Dover	July 1, 1912	Spring No. 11
Dover	July 1, 1912	Spring No. 12
Dover	July 1, 1912	Spring No. 13
Dover	July 1, 1912	Spring No. 14
Dover	July 1, 1912	Spring No. 15
Dover	July 1, 1912	Spring near driven well
Dover	July 1, 1912	Stream
Dover	July 1, 1912	Catch basin near reservoir
Dover	July 1, 1912	100 ft. driven well near catch basin
Dover	July 1, 1912	Reservoir No. 1
Dover	July 1, 1912	Reservoir No. 2
Dover	July 12, 1912	Catch basin, spring
Dover	July 15, 1912	Catch basin
Dover	July 15, 1912	Driven well
Dover	July 15, 1912	Tap
Dover	July 19, 1912	Spring No. 1
Dover	July 19, 1912	Spring No. 2
Dover	July 19, 1912	Spring No. 3
Dover	July 19, 1912	Spring No. 5
Dover	July 19, 1912	Spring No. 6
Dover	July 19, 1912	Spring No. 7
Dover	July 19, 1912	Spring No. 8
Dover	July 19, 1912	Spring No. 9
Dover	July 19, 1912	Spring No. 10
Dover	July 19, 1912	Spring No. 11
Dover	July 19, 1912	Spring No. 12
Dover	July 19, 1912	Spring No. 13

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	0	0	74	42	.006	.022	.000	.48	4.0	22.0	....	0.0	In 1.0 cc.
0	0	*	.....	....	.016	.084	.002	.60	4.5	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
0	0	0	....	....	.008	.024	.002	1.46	6.0	12.0	....	...	In 1.0 cc.
0	0	0	....	....	.006	.020	.001	0.20	6.0	89.0	....	...	In 10.0 cc.
0	0	0	280	280	.006	.016	001	4.80	7.0	88.0	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.

* Slt.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Dover	July 19, 1912	Spring No. 14
Dover	July 19, 1912	Spring No. 15
Dover	July 19, 1912	Spring at well
Dover	July 19, 1912	Catch basin
Dover	July 19, 1912	Reservoir
Dover	July 25, 1912	Spring No. 2
Dover	July 25, 1912	Spring No. 3
Dover	July 25, 1912	Spring No. 5
Dover	July 25, 1912	Spring No. 6
Dover	July 25, 1912	Spring No. 9
Dover	July 25, 1912	Spring No. 10
Dover	July 25, 1912	Spring No. 13
Dover	July 25, 1912	Catch basin
Dover	July 25, 1912	Tap
Dover	Aug. 29, 1912	Tap
Dover	Sept. 13, 1912	Spring
Dover	Sept. 13, 1912	Tap, low service supply
Dover	Sept. 28, 1912	Tap, low service supply
Dover	Sept. 28, 1912	Tap, low service supply
Dover	Sept. 30, 1912	Tap
Dover	Oct. 22, 1912	Tap
Dover	Oct. 22, 1912	Catch basin
Dumont	Aug. 2, 1912	Tap
Dunellen	Jan. 13, 1912	Tap
Dunellen	April 12, 1912	Tap
Dunellen	May 22, 1912	Tap
Dunellen	June 22, 1912	Tap
Dunellen	June 22, 1912	Dug well
Dunellen	June 22, 1912	Reservoir
Dunellen	July 11, 1912	Tap
Dunellen	July 20, 1912	Tap
Dunellen	Sept. 8, 1912	20 ft. well
Dunellen	Sept. 8, 1912	Reservoir
Dunellen	Oct. 8, 1912	Tap
Eatontown	June 3, 1912	Tap
Eatontown	June 18, 1912	Tap
Eatontown	June 18, 1912	Reservoir
Edgewater	Aug. 2, 1912	Tap
Egg Harbor City	April 5, 1912	Tap
Egg Harbor City	July 3, 1912	Tap
Egg Harbor City	Sept. 13, 1912	Tap
Egg Harbor City	Sept. 13, 1912	Tap
Egg Harbor City	Sept. 13, 1912	Tap
Egg Harbor City	Oct. 23, 1912	Tap
Elizabeth	Dec. 2, 1911	Tap
Elizabeth	Feb. 19, 1912	Tap
Elizabeth	Feb. 19, 1912	Tap, well water
Elizabeth	Feb. 19, 1912	Tap, well water
Elizabeth	Feb. 19, 1912	Reservoir, river water
Elizabeth	June 10, 1912	Tap

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.	Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
													In 1.0 cc.
													Absent.
													Absent.
													In 0.1 cc.
													In 10.0 cc.
													In 10.0 cc.
													In 10.0 cc.
0	0	0											In 20.0 cc.
													In 10.0 cc.
													Absent.
0	0			.010	.066	.001	.26	6.5	129.0				In 0.5 cc.
0	0	*											In 20.0 cc.
		0		.048	.060	.000	2.80	9.5					In 10.0 cc.
				.026	.062	.000	.40	7.0					In 10.0 cc.
													Absent.
													In 10.0 cc.
0	0												In 1.0 cc.
0	1-e	0	150	108	.006	.014							In 10.0 cc.
		0			.026	.014	.000	.28	11.0				In 10.0 cc.
0	0						.001	.60	10.0	57.0			In 1.0 cc.
0	1-e	0			.004	.080				54.0		0.0	Absent.
0	Of.	0			.006	.054	.001	.32	10.0				In 0.1 cc.
0	0	*			.028	.060	.003	.60	10.0	68.0			Absent.
0	0	0			.040	.096	.007	.48	10.0	66.0			Absent.
					.020	.066	.003	.48	10.0	66.0			Absent.
0	0						.001	.36	10.0	84.0			In 1.0 cc.
0	1-e	0	200	178	.008	.032							Absent.
0	1-e	0			.024	.036	.003	.52	8.5	66.0			In 10.0 cc.
0	0	0			.106	.108	.000	1.20	8.5			0.0	In 1.0 cc.
0	0	0			.018	.012	.005	.72	9.5				Absent.
					.008	.032	.000	.60	8.0	59.0			In 10.0 cc.
							.000	.20	7.0				In 10.0 cc.
0	0												Absent.
0	1-e	0	90	65	.064	.020	.004	1.00	15.5	4.0		0.2	In 10.0 cc.
		0	99	60	.036	.046	.002	1.60	15.5	2.0		0.1	Absent.
0	0												Absent.
0	0	0			.052	.046	.000	3.00	19.0				In 0.1 cc.
0	0	0			.030	.040	.000	3.00	19.0				In 0.5 cc.
0	1-e	0	96	44	.216	.068	.001	3.40	18.0				Absent.
	0	0	349	300	.090	.020	.002	2.00	17.5	8.0		0.1	Absent.
0	0	*			.010	.060	.002	2.00	8.0	74.0			In 10.0 cc.
0	1-e	*					.008						In 0.1 cc.
0	0	*			.014	.054	.001	.56	7.5	100.0			In 0.1 cc.
0	0	*			.016	.040	.001	.80	8.5	90.0			In 10.0 cc.
0	2-e	0			.010	.028	.002	.48	7.5	108.0			Absent.
					.380		.024	2.00	16.0	59.0			In 10.0 cc.
					.022	.064	.016	.00	9.0	98.0			In 0.1 cc.

† Acid.

* Silt.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Elizabeth	July 25, 1912	Tap
Elizabeth	Aug. 15, 1912	Tap
Elizabeth	Sept. 5, 1912	Tap
Elizabeth	Sept. 26, 1912	Tap
Elizabeth	Sept. 26, 1912	Tap
Elizabeth	Oct. 8, 1912	Tap
Elizabeth	Oct. 11, 1912	Tap
Englewood	Nov. 27, 1911	Tap
Englewood	Jan. 2, 1912	Tap
Englewood	Jan. 30, 1912	Tap
Englewood	Feb. 9, 1912	Tap
Englewood	June 17, 1912	Tap
Englewood	July 26, 1912	Tap
Englewood, South	Oct. 8, 1912	Tap
Essex Fells	Nov. 11, 1911	Tap
Essex Fells	Feb. 6, 1912	Tap
Essex Fells	May 6, 1912	Tap
Essex Fells	May 16, 1912	Tap
Essex Fells	May 21, 1912	Basin, air lift wells
Essex Fells	May 21, 1912	Suction well
Essex Fells	May 21, 1912	Tap, suction well
Essex Fells	May 23, 1912	8 in. well
Essex Fells	May 23, 1912	Bower's well
Essex Fells	May 23, 1912	Tap on Smith well
Essex Fells	May 28, 1912	Tap, suction well
Essex Fells	May 28, 1912	Tap
Essex Fells	June 5, 1912	Tap, suction well
Essex Fells	Oct. 9, 1912	Receiving basin
Essex Fells	Oct. 9, 1912	Tap, suction well
Essex Fells	Oct. 9, 1912	Tap, suction well
Flemington	Mch. 19, 1912	Tap
Flemington	April 16, 1912	Mine hole
Flemington	April 16, 1912	Spring supply
Flemington	April 16, 1912	Driven well
Flemington	April 16, 1912	River
Flemington	June 12, 1912	Tap
Flemington	Sept. 16, 1912	Tap
Franklin Furnace	Dec. 5, 1911	Tap
Franklin Furnace	Mch. 6, 1912	Tap
Freehold	Jan. 17, 1912	Tap
Freehold	Mch. 29, 1912	Outlet from 7 wells, south
Freehold	Mch. 29, 1912	Outlet from wells, north
Freehold	April 17, 1912	Tap
Freehold	July 29, 1912	Tap
Freehold	Oct. 16, 1912	Tap
Frenchtown	Dec. 13, 1911	Tap
Frenchtown	Mch. 11, 1912	Tap
Frenchtown	June 15, 1912	Tap
Frenchtown	Sept. 18, 1912	Tap
Garfield	Jan. 3, 1912	Tap

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
0	1-e	*	....	....	.010	.084	.003	1.72	9.5	97.0	....	...	In 1.0 cc.
0	1-e	0	273	220	.008	.048	.000	1.76	8.0	156.0	....	0.0	In 1.0 cc.
0	1-e	0	....	....	.020	.066	.002	1.00	10.0	114.0	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
0	1-e	0	....	....	.012	.016	.000	1.40	8.0	101.0	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
0	0	0	....	....	.010	.066	.000	.08	6.0	.....	....	...	In 10.0 cc.
0	0	0	....	....	.016	.040	.000	.08	5.5	26.0	....	...	Absent.
0	....	0	....	....	.034	.050	.000	.08	5.5	.....	....	...	Absent.
0	0	*	....	....	.068	.088	.002	.32	6.5	36.0	62.9	...	Absent.
0	1-e	0	....	....	.046	.076	.000	.08	6.0	38.0	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	2-v	*	....	....	.024	.098	.000	.00	7.0	18.0	....	...	In 0.1 cc.
0	0	25	107	84	.004	.038	.000	.40	5.0	54.0	....	0.1	Absent.
0	1-e	0	....	....	.078	.038	002	.08	6.0	54.0	....	...	Absent.
0	1-e	0	127	77	.004	.008	.000	.08	5.0	48.0	....	0.0	Absent.
0	0	0	....	....	.000	.006	.003	2.40	9.0	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	7.0	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	9.0	.....	....	...	In 10.0 cc.
0	0	0	155	136	.014	.030	001	2.00	9.5	60.0	....	0.8	Absent.
0	0	0	90	68	.008	.036	001	.12	5.5	50.0	....	0.0	Absent.
0	0	0	125	96	.030	.030	.001	.52	6.5	55.0	....	0.0	Absent.
0	0	0	90	70	.004	.028	.001	.16	6.0	49.0	....	0.0	Absent.
0	0	0	163	125	.008	.034	.001	1.80	9.0	62.0	....	0.0	Absent.
0	0	0	....	....	.008	.030	.000	2.80	8.0	58.0	....	...	Absent.
0	0	0	....	....	.014	.010	.000	2.40	6.5	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	6.0	51.0	72.9	...	Absent.
...	....	.....	....	....	....	....	....	....	8.0	62.0	71.4	...	Absent.
0	0	0	158	100	.030	.028	.000	2.40	8.0	63.0	....	...	Omitted
0	1-e	*	....	....	.018	.046	.004	.72	4.5	29.0	....	...	In 10.0 cc.
0	0	0	....	....	.038	.056	.004	.84	11.0	.....	....	...	Absent.
0	0	0	....	....	.008	.018	.000	.48	7.0	.....	....	...	In 1.0 cc.
0	0	0	....	....	.006	.016	.003	1.00	4.5	.....	....	...	Absent.
10	0	0	....	....	.004	.054	.004	4.00	8.0	.....	....	...	In 0.1 cc.
5	0	0	....	....	.004	.086	.002	.08	3.5	47.0	....	...	In 1.0 cc.
0	0	0	141	76	.060	.112	.001	.36	6.0	95.0	....	0.1	In 1.0 cc.
0	1-e	0	66	22	.160	.036	.002	.00	1.5	23.0	....	0.2	Absent.
0	0	0	20	10	.180	.032	.000	.00	2.0	8.0	....	0.6	Absent.
0	1-e	*	191	162	.012	.004	.003	.00	5.0	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	0	0	158	142	.008	.012	.001	.00	5.0	71.0	....	0.0	Absent.
0	1-e	0	140	126	.004	.034	.001	.00	5.0	78.0	....	0.4	In 10.0 cc.
0	1-e	*	170	135	.018	.034	.001	.00	5.0	70.0	....	0.0	Absent.
0	0	0	58	48	.006	.028	.003	.80	4.5	24.0	....	0.0	In 10.0 cc.
0	1-e	25	120	90	.010	.072	.002	.00	5.0	21.0	....	0.2	In 10.0 cc.
0	0	0	....	....	.034	.054	.004	.44	3.0	32.0	....	...	In 0.1 cc.
0	0	*	88	54	.046	.108	.001	.36	6.0	47.0	....	0.1	In 0.1 cc.
0	0	0	320	242	.006	.024	.005	6.00	19.0	110.0	....	...	In 10.0 cc.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Garfield	April 1, 1912	Tap
Garfield	July 20, 1912	Tap
German Valley	Nov. 8, 1911	Tap, German Valley Water Co.
German Valley	Nov. 8, 1911	Tap, M. T. Welsh Water Co.
German Valley	Feb. 1, 1912	Tap, German Valley Water Co.
German Valley	Feb. 1, 1912	Tap, M. T. Welsh Water Co.
German Valley	May 2, 1912	Tap, German Valley Water Co.
German Valley	May 2, 1912	Tap, M. T. Welsh Water Co.
German Valley	Aug. 29, 1912	Tap, German Valley Water Co.
German Valley	Aug. 29, 1912	Tap, Welsh supply, old
German Valley	Aug. 29, 1912	Tap, Welsh supply, new
Gibbsboro	Nov. 10, 1911	Tap
Gibbsboro	Feb. 20, 1912	Tap
Gibbsboro	Mch. 22, 1912	Two 150 ft. wells near building No. 37
Gibbsboro	April 2, 1912	Tap
Gibbsboro	April 2, 1912	Tap
Gibbsboro	April 2, 1912	Tap at pump
Gibbsboro	May 24, 1912	Tap
Gibbsboro	Aug. 9, 1912	Tap
Gibbstown	Dec. 8, 1911	Tap
Gibbstown	Mch. 18, 1912	Tap
Gibbstown	June 20, 1912	Tap
Gibbstown	Sept. 5, 1912	Tap
Gladstone	July 19, 1912	Tap
Gladstone	Oct. 9, 1912	Tap
Glassboro	Dec. 4, 1911	Tap
Glassboro	June 18, 1912	Tap
Glassboro	Aug. 12, 1912	Tap
Glassboro	Sept. 3, 1912	Tap
Glen Gardner	Dec. 1, 1911	Tap
Glen Gardner	Mch. 4, 1912	Tap
Glen Gardner	June 13, 1912	Tap
Glen Gardner	Sept. 26, 1912	Tap
Glen Lake	Mch. 19, 1912	Tap
Glen Lake	Dec. 5, 1911	Tap
Glen Lake	Aug. 8, 1912	Tap
Glen Lake	Sept. 8, 1912	Tap
Glen Ridge	June 19, 1912	Tap
Glouccester	Dec. 5, 1911	Raw water
Gloucester	Dec. 6, 1911	Tap, filtered water
Gloucester	Dec. 6, 1911	Tap, filtered water
Gloucester	Feb. 5, 1912	Raw water
Gloucester	Feb. 5, 1912	Raw water
Gloucester	Feb. 5, 1912	Tap, filtered water
Gloucester	Feb. 5, 1912	Tap, filtered water
Gloucester	Feb. 13, 1912	Raw water
Gloucester	Feb. 13, 1912	Tap, filtered water
Gloucester	Mch. 12, 1912	Raw water
Gloucester	Mch. 12, 1912	Tap, filtered water
Gloucester	Mch. 16, 1912	Raw water

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.	Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
0	0	0	334	216	.018	.022	.002	8.00	28.0	123.0	....	0.0	Absent.
0	0	0	370	213	.012	.044	.002	2.00	27.0	132.0	....	0.1	In 10.0 cc.
0	0	0	....	....	.008	.020	.002	.08	2.5	9.0	....	...	In 10.0 cc.
0	0	0	....	....	.016	.020	.001	.16	2.5	9.0	....	...	Absent.
0	....	0	34	25	.012	.012	.000	.04	2.5	10.0	....	0.0	Absent.
0	....	0	25	15	.030	.030	.000	.00	2.0	11.0	....	0.0	In 10.0 cc.
0	0	0	70	38	.000	.004	.000	.08	3.0	16.0	....	0.0	Absent.
0	0	0	30	14	.000	.008	.002	.00	2.5	16.0	....	0.0	Absent.
0	0	0	....	....	.014	.024	.000	.08	3.5	17.0	....	...	Absent.
0	1-e	0	....	....	.008	.018	.000	.08	4.0	17.0	....	...	In 10.0 cc.
0	1-e	*	....	....	.012	.036	.000	.28	3.5	35.0	....	...	In 0.1 cc.
50	Of.	0	38	19	.020	.110	.000	.00	3.5	17.0	....	...	Absent.
0	0	0	87	72	.004	.006	.000	.00	3.5	62.0	....	0.3	In 10.0 cc.
50	Dis.	*	....	....	.014	.058	.000	.00	3.0	.....	....	...	In 1.0 cc.
0	3-e	0	....	....	.006	.010	.003	.00	3.5	.....	....	...	Absent.
0	3-e	0	....	....	.004	.008	.000	.00	3.5	.....	....	...	Absent.
0	3-e	0	....	....	.028	.010	.002	.00	3.5	.....	....	...	Absent.
0	0	0	94	84	.020	.018	.000	.00	3.0	60.0	....	0.2	Absent.
0	1-e	.....	.....	....	.014	.086	.000	.00	3.5	93.0	....	...	Absent.
0	0	0	90	60	.004	.032	.001	3.60	5.0	.....	....	0.1	Absent.
0	1-e	*	82	52	.026	.034	.001	3.20	5.5	10.0	....	0.6	In 10.0 cc.
0	2-e	0	....	....	.022	.070	.010	1.80	4.5	4.0	....	...	Absent.
0	0	0	117	97	.018	.022	.001	2.80	5.0	20.0	....	1.0	Absent.
0	0	0	84	51	.008	.038	.000	.32	4.0	25.0	....	0.0	Absent.
0	0	0	....	....	.024	.020	.000	.60	3.0	30.0	....	...	Absent.
0	0	0	....	....	.016	.030	.003	5.60	28.0	31.0	....	...	Absent.
0	1-e	*	168	133	.016	.040	.001	6.40	28.5	30.0	....	0.4	Absent.
0	1-v	0	204	148	.044	.046	.001	8.00	28.0	68.0	....	0.0	Absent.
0	0	0	185	142	.010	.030	.002	4.00	28.0	51.0	....	0.0	Absent.
10	1-m	*	....	....	.004	.014	.002	.12	3.5	26.0	....	...	In 10.0 cc.
0	0	0	90	75	.016	.022	.003	.12	3.0	13.0	....	0.0	In 10.0 cc.
0	1-m	0	50	40	.000	.006	.000	.04	3.0	13.0	....	0.1	Absent.
0	1-e	*	60	42	.008	.032	.000	.32	3.5	26.0	....	0.3	Absent.
0	0	0	123	112	.000	.014	.000	.00	3.5	66.0	....	0.3	In 10.0 cc.
0	2-e	*	105	87	.054	.048	.003	3.00	3.0	55.0	....	0.6	Absent.
5	1-e	*	118	103	.030	.060	.002	.00	5.0	61.0	....	0.1	Absent.
0	1-e	*	118	90	.018	.090	.001	.00	3.5	103.0	....	0.0	Absent.
0	1-e	0	....	....	.030	.074	.004	.28	6.5	20.0	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
0	0	50	92	80	.070	.066	.001	1.00	6.5	.....	....	0.8	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
0	2-e	40	....	....	.280	.280	.004	.16	5.0	13.0	....	...	In 0.1 cc.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Gloucester	Mch. 16, 1912	Tap, filtered water
Gloucester	April 11, 1912	Raw water
Gloucester	April 11, 1912	Raw, well water
Gloucester	April 11, 1912	Tap, filtered water
Gloucester	April 29, 1912	Raw water
Gloucester	April 29, 1912	Tap, filtered water
Gloucester	May 28, 1912	Raw, well water
Gloucester	May 28, 1912	Tap, filtered water
Gloucester	June 18, 1912	Tap, raw water
Gloucester	June 18, 1912	Tap, filtered water
Gloucester	July 2, 1912	Tap, raw water
Gloucester	July 2, 1912	Tap, filtered water
Gloucester	July 11, 1912	100 ft well, bleach added
Gloucester	July 11, 1912	Tap, filtered water
Gloucester	July 26, 1912	Tap, filtered water
Gloucester	Aug. 6, 1912	Raw well water
Gloucester	Aug. 6, 1912	Tap, unfiltered water with bleach
Gloucester	Aug. 6, 1912	Tap, filtered water
Gloucester	Sept. 7, 1912	Tap, unfiltered water
Gloucester	Sept. 7, 1912	Tap, filtered water
Gloucester	Oct. 25, 1912	Tap
Gloucester	Oct. 25, 1912	Tap, raw water
Grenloch	Nov. 18, 1911	Tap
Grenloch	Feb. 20, 1912	Tap
Grenloch	May 21, 1912	Tap
Hackensack	Feb. 9, 1912	Tap
Hackensack	April 1, 1912	Tap
Hackensack	Aug. 9, 1912	Tap
Hackettstown	Nov. 9, 1911	Tap, Morris supply
Hackettstown	Nov. 9, 1911	Tap, Mine Hill supply
Hackettstown	Feb. 2, 1912	Tap, Mine Hill supply
Hackettstown	Feb. 5, 1912	Tap, Morris supply
Hackettstown	May 9, 1912	Tap, Morris supply
Hackettstown	May 9, 1912	Tap, Mine Hill supply
Hackettstown	Aug. 28, 1912	Tap, Morris supply
Hackettstown	Aug. 28, 1912	Tap, Mine Hill supply
Haddonfield	Nov. 10, 1911	Tap, Mun. supply
Haddonfield	Nov. 10, 1911	Tap, Haddonfield Water Co.
Haddonfield	Feb. 20, 1912	Tap, Mun. supply
Haddonfield	Feb. 20, 1912	Tap, Haddonfield Water Co.
Haddonfield	May 24, 1912	Tap, Mun. supply
Haddonfield	May 24, 1912	Tap, Haddonfield Water Co.
Haddonfield	June 5, 1912	Deep well, Haddonfield Water Co.
Haddonfield	June 5, 1912	Reservoir, Haddonfield Water Co.
Haddonfield	June 5, 1912	Springs, Haddonfield Water Co.
Haddonfield	June 5, 1912	Tap, Haddonfield Water Co.
Haddonfield	June 17, 1912	Tap, Haddonfield Water Co.
Haddonfield	July 8, 1912	Reservoir, Haddonfield Water Co.
Haddonfield	July 8, 1912	Tap, Haddonfield Water Co.
Haddonfield	Aug. 9, 1912	Tap, Mun. supply

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.	Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
0	2–e	60	....	....	.290	.220	.004	.32	5.0	11.0	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
0	1–e	25	130	111	.190	.040	.000	.00	7.5	45.0	....	2.0	Absent.
0	1–e	*	128	98	.028	.060	.007	.00	8.0	44.0	....	2.0	Absent.
0	Bich	*	....	....	.024	.008	.001	.04	20.5	55.0	....	...	Absent.
0	2–e	*	....	....	.024	.104	.007	.00	11.0	39.0	....	...	In 0.1 cc.
0	Bich	*	....	....	.016	.004	.003	.04	22.5	.....	....	...	In 10.0 cc.
0	0	*	....	....	.060	.068	.003	.12	10.0	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
0	1–e	*	....	....	.220	.070	.001	.00	6.5	39.0	....	...	Absent.
60	1–e	25	....	....	.260	.040	.001	.00	6.5	63.0	....	...	Absent.
0	1–e	*	....	....	.070	.066	.005	.00	7.0	72.0	....	...	In 10.0 cc.
0	1–e	30	77	40	.280	.054	.000	.00	8.5	51.0	....	0.0	In 10.0 cc.
0	0	*	125	82	.018	.068	.000	.04	6.5	44.0	....	0.1	In 10.0 cc.
0	1–e	*	109	65	.126	.120	.007	.24	11.0	33.0	....	0.2	In 0.1 cc.
15	1–e	*	109	63	.150	.136	.018	.20	10.0	32.0	....	0.2	In 0.1 cc.
0	0	0	137	97	.070	.030	.000	.00	2.5	64.0	....	1.0	Absent.
0	0	0	111	96	.058	.016	.001	.00	3.5	63.0	....	0.3	In 10.0 cc.
0	0	0	87	48	.006	.018	.003	.00	2.5	61.0	....	0.0	Absent.
0	0	0	....	....	.054	.040	.000	.28	6.5	.....	....	...	Absent.
0	2–e	0	76	52	.032	.052	.000	.00	4.5	14.0	....	0.3	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	3–v	0	88	21	.002	.056	.000	.20	2.5	12.0	....	...	Absent.
0	0	0	57	32	.026	.068	.000	.24	3.0	11.0	....	...	In 1.0 cc.
0	....	0	60	40	.022	.040	.000	.04	3.0	10.0	....	0.0	In 10.0 cc.
0	0	0	56	26	.004	.028	.000	.16	2.5	12.0	....	0.1	In 1.0 cc.
0	0	0	36	25	.006	.022	.002	.00	2.5	11.0	....	0.2	In 1.0 cc.
0	0	*	30	18	.012	.030	.002	.08	2.5	14.0	....	...	In 1.0 cc.
0	0	0	42	24	.030	.090	.001	.08	2.5	25.0	....	0.0	In 1.0 cc.
0	1–e	*	54	26	.050	.134	.001	.16	2.5	31.0	....	0.0	In 1.0 cc.
0	2–e	0	94	77	.046	.030	.000	.12	3.5	30.0	....	...	Absent.
0	2–e	0	68	53	.018	.020	.003	.00	5.0	20.0	....	...	Absent.
0	0	*	177	100	.080	.032	.002	.24	3.5	114.0	....	0.5	Absent.
0	1–e	*	75	63	.070	.044	.010	4.00	6.0	19.0	....	0.4	Absent.
0	0	*	....	....	.068	.026	.001	.28	4.5	34.0	....	0.5	Absent.
0	0	0	80	57	.012	.080	.000	2.40	6.5	14.0	....	0.3	In 0.1 cc.
25	1–e	*	138	115	.138	.024	.001	.00	2.0	84.0	....	8.0	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
0	2–e	0	88	36	.010	.016	.004	2.40	6.5	7.0	....	0.2	In 10.0 cc.
0	1–e	*	65	34	.028	.054	.004	2.00	6.0	6.0	....	2.5	In 1.0 cc.
0	1–e	0	95	43	.020	.046	.007	4.00	7.0	5.0	....	0.2	In 10.0 cc.
0	1–e	0	42	10	.006	.046	.004	4.00	7.0	9.0	....	0.6	Absent.
0	2–e	*	....	....	.036	.026	.001	.76	4.5	64.0	....	...	Absent.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Haddonfield	Aug. 9, 1912	Tap, Haddonfield Water Co.
Haddon Heights	May 31, 1912	Tap
Haddon Heights	June 4, 1912	Tap
Haddon Heights	June 17, 1912	Tap
Haddon Heights	July 8, 1912	Tap
Haledon	Feb. 2, 1912	Tap
Haledon	April 2, 1912	Tap
Haledon	July 18, 1912	Tap
Haledon	Sept. 3, 1912	Raw water
Haledon	Sept. 3, 1912	Cistern, filtered water
Haledon	Sept. 23, 1912	Raw water
Haledon	Sept. 23, 1912	Tap, filtered water
Haledon	Oct. 7, 1912	Raw water
Haledon	Oct. 7, 1912	Tap, filtered water
Hammonton	Feb. 2, 1912	Tap
Hammonton	July 3, 1912	Tap
Hammonton	Oct. 23, 1912	Tap
Hampton	Dec. 1, 1911	Tap
Hampton	Mch. 5, 1912	Tap
Hampton	May 22, 1912	Brook
Hampton	June 11, 1912	Tap
Hampton	Sept. 26, 1912	Tap
Harrison	Mch. 22, 1912	Tap
Harrison	April 8, 1912	Tap
Harrison	Oct. 19, 1912	Tap
Haskell	Mch. 18, 1912	Spring near No. 40 drying house
Haskell	Mch. 18, 1912	Well 14 ft., south end
Haskell	Mch. 18, 1912	Tap, wells No. 1, 2 and 3
Haskell	Mch. 18, 1912	Well No. 4
Haskell	Mch. 18, 1912	Tap in beating room
Haskell	April 3, 1912	Tap
Haworth	Jan. 3, 1912	Tap
Haworth	April 1, 1912	Tap
Haworth	July 24, 1912	Tap
Haworth	Oct. 8, 1912	Tap
Helmetta	Nov. 20, 1911	Well under factory
Helmetta	Nov. 21, 1911	Well in yard
Helmetta	Jan. 22, 1912	Well 208 ft., in yard
Helmetta	Feb. 1, 1912	Dug well in yard
Helmetta	Feb. 1, 1912	Dug well in factory
Helmetta	Feb. 1, 1912	Well 208 ft., in yard
Helmetta	May 7, 1912	Tap, well under factory
Helmetta	May 25, 1912	Tap, well 67 ft.
Helmetta	July 19, 1912	Well 67 ft.
Helmetta	Aug. 15, 1912	Tap, dug well
Helmetta	Aug. 26, 1912	Well 67 ft.
Helmetta	Sept. 27, 1912	Well 67 ft.
Helmetta	Sept. 27, 1912	Well
Helmetta	Oct. 28, 1912	Well under factory
Helmetta	Oct. 28, 1912	Well in factory yard

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
0	0	†	....	....	.024	.054	.000	3.44	4.5	18.0	....	...	In 10.0 cc.
0	1-e	*	....	....	.006	.012	.004	2.80	5.5	11.0	....	...	In 0.1 cc.
..	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
0	1-e	*	80	37	.028	.058	.002	2.80	6.0	4.0	....	0.7	In 10.0 cc.
0	1-e	0	67	21	.066	.050	.004	4.00	7.0	9.0	....	0.7	Absent.
20	0	0	87	37	.006	.066	.000	.40	4.5	17.0	....	0.0	In 10.0 cc.
0	3-e	*	55	38	.014	.066	.003	.08	3.5	.....	....	0.1	In 1.0 cc.
35	2-e	*	92	52	.068	.052	.004	.04	4.5	48.0	....	1.2	Absent.
40	2-e	40	127	70	.188	.242	.003	.12	6.0	57.0	....	0.0	In 0.1 cc.
0	Q	0	101	56	.060	106	.003	.12	6.0	60.0	....	0.0	In 10.0 cc.
15	1-e	25	119	79	.198	.264	.001	.08	7.5	.....	....	0.6	In 1.0 cc.
0	1-e	0	92	65	.042	.114	.000	.04	7.5	42.0	....	0.7	Absent.
60	1-e	*	....	....	.100	.200	.002	.08	5.0	86.0	....	...	In 1.0 cc.
10	1-e	0	....	....	.040	.092	.000	.04	5.0	68.0	....	...	Absent.
0	1-e	0	50	39	.004	.016	.000	.00	3.5	4.0	....	0.0	Absent.
0	2-e	0	....	....	.012	.020	.001	.00	4.0	2.0	....	0.0	Absent.
0	0	*	28	22	.018	.024	.000	.04	4.0	2.6	....	0.0	Absent.
0	0	0	....	....	.010	.026	.003	.46	3.0	14.0	....	...	Absent.
0	0	0	53	32	.004	.014	.008	.32	3.0	8.0	....	0.0	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
0	1-e	*	55	33	.006	.030	.001	.08	3.0	14.0	....	0.1	In 10.0 cc.
0	1-v	*	78	46	.030	.094	.000	.80	3.5	30.0	....	0.2	In 0.1 cc.
0	2-e	0	....	....	.084	.042	.000	.12	4.0	8.0	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	..	Absent.
0	3-v	*	....	....	.016	.110	.001	.08	9.0	.....	....	...	In 10.0 cc.
0	0	0	....	....	.018	.036	.000	.12	4.0	13.0	....	...	Absent.
0	0	0	....	....	Blue	...	.075	.40	19.0	18.0	....	...	In 1.0 cc.
0	0	0	....	....	.016	.012	.003	.00	4.5	.....	....	...	Absent.
0	1-e	40	....	....	.036	.066	.004	.44	3.0	2.0	....	...	In 1.0 cc.
0	0	0	....	....	.006	.012	.001	.00	4.5	.....	....	...	Absent.
0	1-e	0	57	30	.008	.020	.000	.00	3.0	22.0	....	0.0	Absent.
0	0	0	....	....	.008	.016	.001	.80	6.0	62.0	....	...	Absent.
0	0	0	138	100	.006	.018	.001	1.60	7.0	62.0	....	0.0	Absent.
0	1-e	0	....	....	.080	.090	.002	1.60	6.5	62.0	....	..	In 10.0 cc.
0	1-e	0	217	137	.016	.024	.000	2.80	9.0	82.0	....	...	Absent.
0	2-e	0	79	40	.008	.022	.001	.12	11.0	1.0	....	0.2	Absent.
0	0	0	95	70	.220	.084	.003	1.00	12.5	1.0	....	1.5	In 10.0 cc.
0	1-e	0	40	20	.008	.018	.000	.00	4.0	3.0	....	0.0	Absent.
10	....	25	....	....	Ppt.	....	.004	1.12	14.0	11.0	....	...	In 10.0 cc.
0	....	0	56	32	.008	.014	.000	0.12	10.5	4.0	....	0.8	Absent.
0	....	0	30	16	.012	.016	.001	.00	3.5	4.0	26.0	0.9	Absent.
0	0	0	....	....	.030	.032	.003	.00	11.0	4.0	....	...	Absent.
0	1-e	*	47	22	.010	.026	.001	.80	4.0	6.0	....	1.0	Absent.
60	0	80	85	50	.090	.064	.025	1.40	5.5	8.0	....	4.4	Absent.
0	0	0	69	34	.012	.046	.000	.64	11.0	0.0	....	0.0	Absent.
0	1-e	40	34	21	.026	.038	.003	1.20	..	2.0	....	0.5	Absent.
0	1-e	50	....	....	.036	.042	.002	.80	6.0	1.0	....	...	Absent.
0	0	*	....	....	.024	.044	.000	.24	12.0	‡	....	...	Absent.
0	0	*	41	14	.008	.010	.001	.40	9.0	‡	....	0.0	Absent.
0	1-e	25	27	9	.024	.018	.001	.40	4.0	6.0	....	0.7	Absent.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
High Bridge	Dec. 1, 1911	Tap
High Bridge	Mch. 13, 1912	Tap
High Bridge	June 11, 1912	Tap
High Bridge	Sept. 25, 1912	Tap
High Bridge	Oct. 5, 1912	Tap
High Bridge	Oct. 10, 1912	Tap
Highlands	Nov. 17, 1911	Tap
Highlands	Feb. 15, 1912	Tap
Highlands	May 10, 1912	Tap
Highlands	Aug. 9, 1912	Tap
Hightstown	Nov. 20, 1911	Raw water
Hightstown	Nov. 21, 1911	Tap, filtered water
Hightstown	Feb. 1, 1912	Raw water
Hightstown	Feb. 1, 1912	Tap, filtered water
Hightstown	May 6, 1912	Raw water
Hightstown	May 6, 1912	Tap, filtered water
Hightstown	Aug. 11, 1912	Catch basin
Hightstown	Aug. 12, 1912	Tap, filtered water
Hoboken	Aug. 2, 1912	Tap
Hoboken, West	May 31, 1912	Tap
Hoboken, West	June 28, 1912	Tap
Holly Beach	Mch. 15, 1912	Well 356 ft.
Holly Beach	May 30, 1912	Tap
Holly Beach	Sept. 25, 1912	Tap
Holly Beach	Oct. 10, 1912	Tap
Holly Beach	Oct. 10, 1912	Tap
Hopewell	Jan. 10, 1912	Tap
Hopewell	April 11, 1912	Tap
Hopewell	July 10, 1912	Tap
Hopewell	Oct. 7, 1912	Tap
Irvington	Aug. 27, 1912	Tap
Island Heights	Jan. 16, 1912	Tap
Island Heights	Mch. 26, 1912	Tap
Island Heights	April 6, 1912	Well
Island Heights	April 24, 1912	Tap
Island Heights	July 30, 912	Tap
Island Heights	Oct. 17, 1912	Tap
Jamesburg	Jan. 17, 1912	Tap
Jamesburg	April 18, 1912	Tap
Jamesburg	July 29, 1912	Tap
Jamesburg	Oct. 11, 1912	Tap
Jersey City	Feb. 5, 1912	Tap
Jersey City	April 4, 1912	Tap
Jersey City	July 28, 1912	Tap
Jersey City	Sept. 5, 1912	Tap
Jersey City	Oct. 4, 1912	Tap
Kenilworth	Jan. 4, 1912	Tap
Kenilworth	April 5, 1912	Tap
Kenilworth	July 22, 1912	Tap
Kenilworth	Oct. 9, 1912	Tap

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
0	0	*	61	51	.006	.042	.001	2.00	3.5	18.0	....	0.3	In 1.0 cc.
0	0	300	209	156	.070	.340	.005	.80	3.0	6.0	....	4.0	In 0.1 cc.
0	1-e	0	60	43	.012	.032	.001	.00	3.0	16.0	....	0.0	Absent.
0	0	25	78	42	.050	.116	.000	.28	2.5	21.0	....	0.1	In 0.1 cc.
15	1-e	0	....	....	.026	.056	.001	.28	3.0	.....	....	...	In 10.0 cc.
0	2-v	*	....	....	.012	.098	.003	.40	6.0	22.0	....	...	In 10.0 cc.
0	0	30	155	122	.004	.028	.000	.04	6.5	82.0	....	0.4	Absent.
0	1-e	*	146	126	.010	.004	.001	.04	6.5	87.0	....	0.8	In 1.0 cc.
10	0	*	150	131	.010	.014	.000	0.12	6.0	88.0	....	1.0	Absent.
0	2-v	0	....	....	.010	.042	.000	.00	6.0	143.0	....	...	Absent.
0	2-e	0	18	10	.030	.042	.000	.00	3.0	6.0	....	1.5	Absent.
0	2-e	0	....	....	.008	.018	.000	.00	3.0	11.0	....	0.0	Absent.
0	....	0	30	18	.016	.042	.002	.00	3.0	11.0	39.0	1.9	Absent.
0	....	0	18	12	.016	.028	.000	.00	3.0	7.0	....	0.0	Absent.
0	0	0	....	....	.012	.014	.000	.00	3.0	6.0	....	...	Absent.
0	0	0	....	....	.016	.014	.001	.00	3.0	5.0	....	...	Absent.
25	1-e	*	24	20	.044	.064	.001	.00	3.0	6.0	....	0.0	Absent.
0	0	0	16	14	.080	.042	.001	.00	3.0	10.0	....	0.0	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 20.0 cc.
0	1-e	*	....	....	.014	.038	.000	.08	6.5	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	....	....	...	In 10.0 cc.
0	0	0	230	200	.420	.080	.003	....	47.0	97.0	....	0.6	In 1.0 cc.
0	1-e	*	....	....	Ppt.	.060	000	.00	44.0	91.0	....	...	In 1.0 cc.
0	1-e	*	217	148	Ppt.	.052	.014	.00	46.5	96.0	....	Pt.	In 1.0 cc.
0	1-e	0	....	....	Ppt.	.042	.008	.00	48.0	100.0	....	...	In 10.0 cc.
0	1-e	0	....	....	.070	.048	.001	.20	41.5	95.0	....	...	In 10.0 cc.
0	2-e	0	176	136	.010	.024	000	.00	4.5	133.0	....	...	Absent.
0	0	0	....	....	.004	.022	.000	.08	4.0	126.0	....	...	Absent.
0	0	0	196	124	.008	.040	.000	.00	7.5	158.0	....	0.8	Absent.
0	1-e	*	....	....	.024	.042	.000	.04	4.5	161.0	....	...	Absent.
0	1-e	0	....	....	.036	.030	.000	.12	6.0	.....	....	...	In 10.0 cc.
0	0	25	111	82	.012	.018	.004	.00	3.0	56.0	....	1.0	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
30	Dis.	40	....	....	.096	.020	.001	.00	4.0	.....	....	...	Absent.
0	2-e	*	98	80	.020	.012	.000	.00	2.5	43.0	....	2.5	Absent.
0	1-e	25	104	89	.016	.070	.000	.04	3.5	60.0	....	0.9	Absent.
0	1-v	35	102	52	.006	.018	.001	.00	3.5	55.0	....	0.1	In 10.0 cc.
0	2-e	0	87	26	.010	.014	.000	.20	3.5	.....	....	...	Absent.
0	0	0	76	66	.006	.022	.000	.28	4.0	34.0	....	0.0	Absent.
0	0	0	48	36	.014	.014	.003	.32	3.0	6.0	....	0.2	Absent.
0	1-e	0	30	8	.012	.014	.002	.40	3.5	2.0	....	0.0	Absent.
0	0	0	87	72	.082	.102	.003	.00	4.5	28.0	....	...	Absent.
0	1-v	*	45	28	.036	.080	.010	.04	3.5	.....	....	0.4	Absent.
0	1-e	*	....	....	.018	.046	.003	.12	4.0	20.0	....	...	In 10.0 cc.
0	1-e	*	....	....	.062	.102	.004	.12	6.0	52.0	....	...	In 1.0 cc.
0	2-v	*	....	....	.084	.084	.001	.16	6.0	31.0	....	...	Absent.
0	0	*	115	87	.006	.022	002	.32	4.5	56.0	....	0.1	In 10.0 cc.
0	0	0	95	71	.006	.010	.001	.12	4.0	56.0	....	0.1	Absent.
0	0	0	127	96	.006	.022	.001	.16	4.5	59.0	....	0.2	In 1.0 cc.
0	0	0	....	....	.006	.054	.001	.20	4.0	62.0	....	...	Absent.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Keyport,	Nov. 17, 1911	Tap
Keyport,	Feb. 15, 1912	Reservoir, raw water
Keyport,	Feb. 15, 1912	Reservoir, filtered water
Keyport,	May 10, 1912	Raw water
Keyport,	May 10, 1912	Tap, filtered water
Keyport,	Aug. 9, 1912	Raw water
Keyport,	Aug. 9, 1912	Tap, filtered water
Keyport,	Aug. 30, 1912	Tap
Lakehurst	Jan. 16, 1912	Tap
Lakehurst	April 17, 1912	Tap
Lakehurst	July 30, 1912	Tap
Lakehurst	Oct. 21, 1912	Tap
Lakewood	Jan. 16, 1912	Tap
Lakewood	April 17, 1912	Tap
Lakewood	Oct. 19, 1912	Tap
Lambertville	Mch. 26, 1912	Tap
Lambertville	June 12, 1912	Reservoir, raw water
Lambertville	June 12, 1912	Tap, filtered water
Lambertville	July 19, 1912	Lower filter
Lambertville	July 19, 1912	Tap, filtered water
Lambertville	Aug. 1, 1912	Reservoir, raw water
Lambertville	Aug. 1, 1912	Tap, filtered water
Lambertville	Sept. 18, 1912	Raw water
Lambertville	Sept. 18, 1912	Tap, filtered water
Lambertville	Oct. 4, 1912	Tap
Lambertville	Oct. 7, 1912	Tap
Lambertville	Oct. 7, 1912	Reservoir
Laurel Springs	Nov. 18, 1911	Tap
Laurel Springs	Feb. 21, 1912	Tap
Laurel Springs	May 21, 1912	Tap
Laurel Springs	Aug. 9, 1912	Tap
Laurel Springs	Aug. 27, 1912	Well No. 1
Laurel Springs	Aug. 27, 1912	Well No. 2
Laurel Springs	Aug. 27, 1912	Well No. 3
Laurel Springs	Aug. 27, 1912	Well No. 4
Laurel Springs	Aug. 27, 1912	Well No. 5
Laurel Springs	Sept. 3, 1912	Well No. 4
Laurel Springs	Sept. 3, 1912	Well No. 5
Laurel Springs	Sept. 25, 1912	Tap
Lawrenceville	Jan. 9, 1912	Tap
Lawrenceville	April 11, 1912	Tap
Lawrenceville	July 10, 1912	Tap
Lawrenceville	Oct. 7, 1912	Tap
Lawrenceville	Oct. 16, 1912	Well 8x65 ft.
Little Falls	April 3, 1912	Raw water
Little Falls	April 3, 1912	Tap, filtered water
Little Falls	July 18, 1912	Tap, raw water
Little Falls	July 18, 1912	Tap, filtered water
Little Falls	Sept. 3, 1912	Raw water
Little Falls	Sept. 3, 1912	Tap, filtered water

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.	Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
0	0	0	68	54	.010	.066	.000	.00	3.0	35.0	....	0.1	Absent.
0	1-e	*	40	24	.046	.008	.000	.00	3.0	19.0	....	2.6	Absent.
0	1-e	0	80	48	.044	.040	004	.00	3.0	33.0	....	0.0	Absent.
50	0	25	....	....	.024	.012	.000	.00	3.0	29.0	....	...	Absent.
0	0	0	58	35	.012	.006	.000	.00	3.0	22.0	....	0.1	Absent.
0	1-e	40	....	....	.056	.026	.000	.00	3.0	59.0	....	...	Absent.
0	0	0	....	....	.042	.022	.000	.00	3.0	37.0	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	0.2	Absent.
0	0	*	29	22	.070	.012	.001	1.00	6.5	7.0	....	0.5	Absent.
6	0	0	26	15	.016	.014	.004	.00	5.0	2.0	....	0.2	Absent.
0	1-e	0	....	....	.008	.056	.000	.00	3.5	2.0	....	...	Absent.
0	1-v	0	....	....	.032	.014	.000	.00	5.5	6.0	....	...	Absent.
0	0	*	71	37	.070	.016	.000	.04	5.0	18.0	....	0.3	Absent.
0	0	0	17	9	.016	.022	.006	.20	5.0	5.0	....	...	Absent.
0	1-v	*	....	....	.012	.018	.000	.00	5.5	14.0	....	...	Absent.
0	1-e	*	70	30	.026	.082	.010	.24	2.5	12.0	....	0.2	In 1.0 cc.
10	1-v	0	68	48	.020	.106	.003	.04	3.0	30.0	....	0.4	In 0.1 cc.
5	1-v	0	80	60	.036	.054	.002	.04	3.0	31.0	....	0.0	In 1.0 cc.
60	0	70	....	....	.458	.262	.002	.04	4.0	53.0	....	...	In 0.1 cc.
50	1-v	0	125	64	.432	.112	.001	.04	3.5	55.0	....	1.7	In 0.1 cc.
0	1-e	0	124	81	.058	.512	.002	.00	3.5	38.0	....	0.0	In 1.0 cc.
0	1-e	0	112	75	.022	.146	.002	.08	3.5	38.0	....	0.0	In 1.0 cc.
30	1-e	50	105	57	.068	.364	.000	.08	6.0	50.0	....	0.1	In 1.0 cc.
0	0	0	96	57	.148	.122	.001	.08	6.0	61.0	....	0.0	Absent.
0	1-e	0	....	....	.082	.110	.000	.00	4.0	.....	....	...	In 10.0 cc.
0	2-e	0	72	48	.034	.094	.001	.08	4.0	36.0	....	0.0	Absent.
0	2-e	60	92	48	.062	.236	.002	.04	4.0	37.0	....	0.3	In 10.0 cc.
0	0	0	122	100	.010	.036	.000	.00	3.0	93.0	....	0.2	Absent.
0	0	0	120	100	.010	.026	.000	.00	4.0	81.0	....	0.3	In 10.0 cc.
0	1-e	0	120	106	.012	.014	.000	.08	3.0	78.0	....	...	Absent.
0	1-e	0	....	....	.006	.058	.000	.00	3.5	138.0	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	...	...	...	...	....	....	....	....	...	....	....	...	Absent.
0	1-e	25	102	38	.060	.052	.000	.04	4.5	73.0	....	0.5	Absent.
0	0	0	102	30	.018	.020	.000	1.20	6.5	15.0	....	0.0	In 10.0 cc.
10	0	*	82	64	.006	.012	.000	2.80	6.0	14.0	....	0.0	Absent.
0	1-e	0	129	67	.072	.096	.007	2.40	8.5	35.0	....	0.1	In 10.0 cc.
0	0	*	....	....	.028	.024	.012	.48	11.5	21.0	....	...	In 10.0 cc.
0	1-e	0	....	....	.014	.018	.002	2.80	11.5	20.0	....	...	In 10.0 cc.
25	2-e	*	60	25	.018	.042	.002	.12	3.5	11.0	....	0.3	In 10.0 cc.
0	2-e	0	50	17	.014	.018	.000	.12	4.0	4.0	....	0.0	Absent.
35	1-e	*	107	67	.102	.090	.002	.08	8.5	46.0	....	0.6	In 1.0 cc.
0	1-e	0	146	70	.052	.048	.000	.04	8.0	34.0	....	0.0	Absent.
0	1-e	*	109	71	.086	.148	.008	.12	10.5	69.0	....	0.2	In 0.1 cc.
0	1-e	0	126	71	.064	.096	.000	.16	10.5	47.0	....	0.1	Absent.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Little Falls	Sept. 28, 1912	Tap, raw water
Little Falls	Sept. 28, 1912	Tap, filtered water
Little Silver	July 30, 1912	Raw water, Tintern Manor Water Co.
Little Silver	July 30, 1912	Tap, filtered water, Tintern Manor Water Co.
Little York	Dec. 13, 1911	Tap
Little York	Mch. 11, 1912	Tap
Little York	June 18, 1912	Tap
Little York	Sept. 19, 1912	Tap
Lodi	Jan. 3, 1912	Tap
Lodi	April 1, 1912	Tap
Lodi	July 17, 1912	Tap
Lodi	Oct. 7, 1912	Tap
Long Branch	Nov. 18, 1911	Raw water, Whale Pond supply
Long Branch	Nov. 18, 1911	Tap
Long Branch	Feb. 14, 1912	Raw water
Long Branch	Feb. 14, 1912	Tap
Long Branch	May 9, 1912	Raw water
Long Branch	May 9, 1912	Tap
Long Branch	July 30, 1912	Raw water, Whale Pond supply
Long Branch	Aug. 9, 1912	Raw water, Newman Springs supply
Long Branch	Aug. 9, 1912	Tap, filtered water, Newman Springs supply
Long Branch	Aug. 9, 1912	Raw water, Whale Pond supply
Long Branch	Aug. 9, 1912	Tap, filtered water, Whale pond supply
Long Branch	Sept. 17, 1912	Raw water, Newman Springs supply
Long Branch	Sept. 17, 1912	Tap, filtered water, Newman Springs supply
Long Branch	Sept. 17, 1912	Tap, filtered water, Newman Springs supply
Long Branch	Oct. 11, 1912	Raw water, Whale Pond supply
Long Branch	Oct. 11, 1912	Tap, filtered water, Newman Springs supply
Longport	Jan. 3, 1912	Tap
Longport	April 6, 1912	Tap
Longport	July 5, 1912	Tap
Lumberton	Dec. 6, 1911	Tap
Lumberton	Mch. 19, 1912	Tap
Lumberton	June 17, 1912	Tap
Lumberton	Sept. 9, 1912	Tap
Madison	Nov. 6, 1911	Tap
Madison	Jan. 12, 1912	Well 70 ft.
Madison	Feb. 5, 1912	Tap
Madison	May 1, 1912	Tap
Madison	Sept. 4, 1912	Tap
Mahwah	Dec. 8, 1911	Tap, J. Winter's supply
Mahwah	Dec. 8, 1911	Tap, A. Winter's supply
Mahwah	Dec. 27, 1911	Tap, A. Winter's supply
Mahwah	Jan. 2, 1912	Tap, J. Winter's supply
Mahwah	Jan. 2, 1912	Spring, A. Winter's supply
Mahwah	Jan. 2, 1912	Tap, Geo. Dunlop Water Co.
Mahwah	Mch. 7, 1912	Tap, A. Winter's supply
Mahwah	April 6, 1912	Tap, J. Winter's supply
Mahwah	April 6, 1912	Tap, A. Winter's supply
Mahwah	April 6, 1912	Tap, Geo. Dunlop Water Co.

‡ Acid.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS Free Ammonia.	NITROGEN AS Alb. Ammonia.	NITROGEN AS Nitrites.	NITROGEN AS Nitrates.	Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
0	1-e	*	333	254	.080	.106	.005	.28	7.5	44.0	....	0.2	In 0.1 cc.
0	1-e	0	118	59	.032	.068	.000	.08	7.5	35.0	....	0.1	Absent.
0	1-e	*	99	58	.076	.250	.006	.12	7.0	26.0	....	1.2	In 0.1 cc.
0	0	0	72	63	.042	.084	.001	.16	6.0	28.0	....	0.0	Absent.
0	0	*	90	78	.014	.026	.002	.60	3.5	55.0	....	...	Absent.
0	1-e	0	112	76	.006	.010	.001	.00	5.0	42.0	....	...	Absent.
0	0	0	80	50	.004	.010	.001	.00	3.5	38.0	....	0.0	Absent.
0	0	0	87	54	.020	.064	.000	.40	3.5	70.0	....	0.1	In 0.1 cc.
0	0	0	....	....	.014	.020	.003	4.00	10.0	89.0	....	...	Absent.
0	0	0	205	155	.004	.006	.003	4.00	11.0	81.0	....	5.0	Absent.
0	1-v	0	212	154	.022	.018	.002	3.00	9.5	79.0	....	0.0	Absent.
0	1-e	0	186	82	.042	.024	.000	2.00	6.5	62.0	....	...	In 10.0 cc.
20	2-e	30	88	60	.034	.052	.002	.04	9.0	6.0	....	1.5	In 0.1 cc.
0	0	0	73	49	.028	.038	.001	.04	8.5	5.0	....	0.2	Absent.
0	1-e	*	84	58	.070	.044	.004	0.12	10.0	....	....	0.4	In 0.1 cc.
0	1-e	0	78	58	.078	.054	.003	0.12	10.5	....	....	0.0	Absent.
20	0	*	57	47	.044	.066	.002	.12	7.0	4.0	....	0.7	In 0.1 cc.
0	0	0	50	37	.030	.024	.000	.12	7.0	5.0	....	0.2	Absent.
0	1-e	*	87	13	.056	.120	.002	.08	9.0	24.0	....	0.8	In 0.1 cc.
0	1-e	35	....	....	.134	.134	.000	.00	8.0	41.0	....	...	In 0.1 cc.
0	1-e	0	....	....	.006	.096	.000	.00	7.0	41.0	....	...	Absent.
0	1-v	*	....	....	.070	.062	.004	.12	10.0	35.0	....	...	In 1.0 cc.
0	0	0	....	....	.020	.038	.003	.20	11.0	26.0	....	...	In 10.0 cc.
35	2-e	*	111	67	.080	.124	.003	.04	7.5	36.0	....	0.2	In 0.1 cc.
0	1-e	0	191	137	.066	.074	.001	.08	7.5	38.0	....	0.0	In 1.0 cc.
0	1-e	*	92	64	.060	.098	.000	.28	8.5	35.0	....	0.0	In 1.0 cc.
0	2-e	*	....	....	.062	.080	.004	.12	10.0	24.0	....	...	In 1.0 cc.
0	1-e	0	....	....	.028	.048	.000	.12	10.0	21.0	....	...	In 1.0 cc.
0	0	0	135	103	.004	.010	.000	.00	8.0	54.0	....	0.1	Absent.
0	0	0	120	84	.004	.010	.000	.00	8.5	52.0	....	0.0	Absent.
0	0	0	135	101	.014	.086	.002	.04	7.0	54.0	....	0.1	Absent.
120	1-v	*	63	30	.036	.130	.000	.04	4.0	....	....	0.7	In 10.0 cc.
80	3-v	0	43	14	.020	.106	.000	.08	2.5	†	....	0.8	In 10.0 cc.
150	1-v	*	46	15	.058	.094	.000	.12	3.0	5.0	....	1.5	In 1.0 cc.
90	2-e	0	62	32	.048	.112	.000	.12	5.5	15.0	....	0.2	Absent.
0	0	*	160	140	.004	.088	.002	1.60	7.0	89.0	....	0.3	Absent.
0	1-m	*	....	....	.034	.086	.000	1.20	7.5	....	....	...	Absent.
0	Dis.	0	....	....	....	....	.005	1.28	7.5	88.0	....	0.0	Absent.
0	0	0	169	157	.002	.000	.003	1.40	5.5	86.0	....	...	Absent.
0	1-e	0	....	....	.022	044	.002	1.80	9.0	94.0	....	...	Absent.
0	0	0	68	46	.010	.080	.001	.20	7.5	....	....	0.0	Absent.
0	Sw't	*	153	88	.420	....	.050	.04	24.5	....	....	0.1	Absent.
0	1-v	*	....	....	.024	.064	.060	.00	10.0	....	....	...	Absent.
0	1-e	*	70	50	.010	.020	.001	.80	6.0	19.0	....	0.0	Absent.
0	0	0	113	90	.004	.010	.001	.08	4.0	70.0	....	0.0	Absent.
0	1-v	*	76	45	.012	.044	.002	1.00	3.5	53.0	....	0.0	Absent.
0	0	*	112	76	.008	.018	.005	.04	6.5	71.0	....	0.0	Absent.
0	0	0	116	60	.130	.064	.004	.40	5.0	25.0	....	0.2	Absent.
0	0	0	136	96	.032	.020	.003	.32	5.0	66.0	....	0.0	Absent.
0	0	0	84	60	.006	.008	.000	.32	4.0	5.0	.....	0.0	Absent.

† Iron ppt.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Mahwah	June 10, 1912	Tap, A. Winter's supply
Mahwah	June 10, 1912	Tap, J. Winter's supply
Mahwah	June 10, 1912	Tap, Geo. Dunlop Water Co.
Mahwah	Oct. 2, 1912	Tap, A. Winter's supply
Mahwah	Oct. 2, 1912	Tap, J. Winter's supply
Mahwah	Oct. 2, 1912	Tap, Cragmere Water Co.
Manasquan	Jan. 17, 1912	Tap
Manasquan	April 17, 1912	Tap
Manasquan	July 29, 1912	Tap
Manasquan	Oct. 16, 1912	Tap
Mantoloking	Jan. 16, 1912	Tap
Mantoloking	Feb. 27, 1912	Reservoir
Mantoloking	April 18, 1912	Tap
Mantoloking	July 30, 1912	Tap
Mantoloking	Aug. 5, 1912	Well 900 ft.
Mantoloking	Aug. 5, 1912	Tap
Mantoloking	Oct. 22, 1912	Tap
Mantua	Dec. 6, 1911	Tap
Mantua	Mch. 19, 1912	Tap
Mantua	Sept. 3, 1912	Tap
Margate	Jan. 3, 1912	Tap
Margate	April 6, 1912	Tap
Margate	July 5, 1912	Tap
Margate	Oct. 24, 1912	Tap
Marlton	Dec. 5, 1911	Tap
Marlton	Mch. 8, 1912	Tap
Marlton	June 14, 1912	Tap
Marlton	Aug. 7, 1912	Tap
Matawan	Nov. 17, 1911	Tap
Matawan	Feb. 15, 1912	Reservoir, raw water
Matawan	Feb. 15, 1912	Tap, filtered water
Matawan	May 10, 1912	Raw water
Matawan	May 10, 1912	Tap, filtered water
Matawan	May 31, 1912	Tap, filtered water
Matawan	Aug. 10, 1912	Raw water from well
Matawan	Aug. 10, 1912	Tap, filtered water
May's Landing	Jan. 3, 1912	Tap, Power Co's. supply
May's Landing	Jan. 3, 1912	Tap, Mun. supply
May's Landing	April 12, 1912	Tap, Power Co's. supply
May's Landing	July 6, 1912	Tap, Power Co's. supply
May's Landing	July 6, 1912	Tap, Mun. supply
May's Landing	Oct. 23, 1912	Tap, Mun. supply
May's Landing	Oct. 23, 1912	Tap, Power Co's. supply
Medford	Dec. 4, 1911	Tap
Medford	Mch. 8, 1912	Tap
Medford	June 14, 1912	Tap
Medford	Sept. 9, 1912	Tap
Mendham	Nov. 10, 1911	Tap
Mendham	Feb. 6, 1912	Tap
Mendham	Feb. 26, 1912	Hasel Spring

† Iron ppt

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
0	Of.	0	37	14	.094	.030	.200	.08	7.0	66.0	....	0.4	Absent.
0	1-e	*	....	....	.008	.016	.001	.00	6.0	23.0	....	...	Absent.
0	1-e	0	....	....	.044	.026	.000	.00	8.0	52.0	....	...	Absent.
0	0	0	63	35	.012	.028	.000	.16	5.0	75.0	....	0.0	Absent.
0	0	0	112	70	.026	.054	.000	.00	5.5	81.0	....	0.0	Absent.
0	0	0	30	36	.044	.032	.000	0.8	3.5	54.0	....	0.0	Absent.
0	0	*	50	32	.054	.024	.001	.00	10.5	15.0	....	0.2	Absent.
0	1-e	*	52	32	.022	.020	.012	.00	10.5	5.0	....	0.3	Absent.
0	1-e	0	....	....	.016	.040	.001	.00	10.0	1.0	....	...	Absent.
0	1-v	*	46	8	.046	.022	.001	.00	10.0	2.0	....	0.0	Absent.
0	1-e	0	145	118	.210	.060	.008	.20	2.5	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 20.0 cc.
0	0	0	160	142	.028	.008	.005	.20	2.0	.....	....	...	Absent.
0	1-e	0	....	....	.002	.018	.005	.12	2.0	104.0	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
0	1-e	*	158	98	.008	.012	.000	.20	3.0	101.0	....	0.1	In 10.0 cc.
3	1-e	*	218	196	.014	.018	.003	.00	13.0	142.0	....	0.5	Absent.
0	0	*	226	188	.006	.010	.004	.00	13.0	134.0	....	1.2	Absent.
0	0	0	204	142	.020	.028	.000	.00	13.0	216.0	....	0.0	In 10.0 cc.
0	0	0	122	97	.002	.012	.000	.00	16.0	56.0	....	0.1	Absent.
0	0	*	458	348	.460	....	.005	.00	55.0	98.0	....	0.2	Absent.
0	1-m	0	116	63	.096	.042	.008	.08	13.0	51.0	....	0.0	In 1.0 cc.
0	1-e	0	....	....	.040	.014	.001	.00	49.0	52.0	....	...	In 10.0 cc.
0	1-e	0	....	....	.026	.046	.002	.00	4.0	128.0	....	...	Absent.
0	0	0	188	166	.104	.068	.000	.00	3.5	124.0	....	0.4	In 10.0 cc.
0	0	0	168	158	.008	.016	.001	.00	3.5	116.0	....	0.3	In 10.0 cc.
0	1-e	*	166	155	.014	.006	.000	.00	4.0	188.0	....	0.0	In 1.0 cc.
0	0	0	44	31	.010	.020	.000	.00	7.0	.....	....	0.1	Absent.
0	1-e	*	36	30	.030	.000	.002	.00	3.0	18.0	....	5.0	Absent.
0	1-e	0	14	10	.002	.000	.002	.00	3.0	6.0	....	0.0	Absent.
30	0	25	....	....	.082	.010	.000	.00	3.0	6.0	....	...	Absent.
0	0	0	27	13	.004	.010	000	.00	3.0	3.0	....	0.2	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	....	....	...	In 1.0 cc.
0	1-e	50	....	....	.082	.030	000	00	3.0	3.0	....	...	In 0.1 cc.
0	1-e	0	....	....	.016	.022	000	.00	3.0	3.0	....	...	Absent.
170	1-v	0	52	37	.014	.100	000	.00	3.0	‡	....	0.2	In 10.0 cc.
0	0	30	151	131	.006	.012	.000	.00	4.0	23.0	....	...	Absent.
30	2-v	*	26	11	.016	.068	.000	.00	2.0	‡	....	...	In 10.0 cc.
110	1-e	*	40	14	.030	.090	.001	.12	3.5	3.0	....	0.9	In 1.0 cc.
0	1-e	60	112	96	.008	.036	.001	.00	4.5	19.0	....	4.0	In 10.0 cc.
0	1-e	20	110	89	.006	.012	.000	.00	5.5	24.0	....	0.7	Absent.
20	0	*	....	....	.012	.032	.000	.08	4.5	2.0	....	...	In 10.0 cc.
30	2-e	*	....	....	.018	.054	.000	.08	3.0	0.0	....	...	In 10.0 cc.
50	2-v	0	44	30	.016	.032	.000	.00	3.0	0.0	....	0.6	In 10.0 cc.
50	2-v	*	45	34	.004	.036	.000	.00	3.0	1.0	....	0.3	Absent.
70	1-e	0	35	11	.048	.104	.000	.12	4.5	5.0	....	0.1	In 0.1 cc.
0	0	*	58	36	.018	.078	.000	.08	3.5	15.0	....	...	In 0.1 cc.
0	0	0	....	....	.008	.040	.002	.08	3.0	23.0	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Mendham	Feb. 26, 1912	Cramer Brook
Mendham	Feb. 26, 1912	Borrow Pit Spring
Mendham	May 6, 1912	Tap
Mendham	Oct. 1, 1912	Tap
Merchantville	Nov. 10, 1911	Tap
Merchantville	Feb. 21, 1912	Raw water from well
Merchantville	Feb. 21, 1912	Tap, filtered water
Merchantville	May 21, 1912	Tap, unfiltered water
Merchantville	May 21, 1912	Tap, filtered water
Merchantville	July 29, 1912	Well No. 1
Merchantville	July 29, 1912	Well No. 2
Merchantville	July 29, 1912	Well No. 4
Merchantville	July 29, 1912	Well No. 8
Merchantville	Aug. 7, 1912	Tap, raw water
Merchantville	Aug. 7, 1912	Tap, filtered water
Merchantville	Aug. 7, 1912	Tap
Merchantville	Aug. 15, 1912	Well No. 2
Merchantville	Aug. 15, 1912	Well No. 3
Merchantville	Aug. 15, 1912	Well No. 5
Merchantville	Aug. 15, 1912	Well No. 6
Merchantville	Aug. 15, 1912	Well No. 7
Merchantville	Aug. 30, 1912	Well 70 ft.
Merchantville	Aug. 30, 1912	Well 120 ft.
Metuchen	Sept. 16, 1912	Tap
Mickleton	Dec. 1, 1911	Tap
Mickleton	Dec. 1, 1911	Tap
Mickleton	Mch. 20, 1912	Tap
Mickleton	Mch. 20, 1912	Tap
Mickleton	June 22, 1912	Tap
Mickleton	June 22, 1912	Tap
Mickleton	Sept. 11, 1912	Tap
Mickleton	Sept. 11, 1912	Tap
Milford	Dec. 13, 911	Tap
Milford	Mch. 11, 1912	Tap
Milford	June 13, 1912	Tap
Milford	Sept. 19, 1912	Tap
Milburn	Oct. 28, 1912	Tap
Milburn	Oct. 28, 1912	Tap
Milburn	Oct. 28, 1912	Tap
Milburn	Oct. 28, 1912	Tap
Milburn	Oct. 28, 1912	Tap
Millington	Dec. 6, 1911	Tap
Millington	Mch. 8, 1912	Tap
Millington	June 4, 1912	Tap
Millington	Sept. 30, 1912	Tap
Millville	Jan. 4, 1912	Tap, raw water, Millville Water Co.
Millville	Jan. 4, 1912	Tap, Millville Water Co.
Millville	Jan. 4, 1912	Raw water, People's Water Co.
Millville	Jan. 4, 1912	Tap, filtered water, People's Water Co.
Millville	Jan. 9, 1912	Raw water, Millville Water Co.

† Iron ppt

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS Free Ammonia.	Alb. Ammonia.	Nitrites.	Nitrates.	Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
...	....	.....	....	....	....	....	.....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	...	...	....	....	.....	....	....	.....	....	...	Absent.
0	0	0	47	30	.010	.028	.000	.00	2.5	7.0	....	...	In 10.0 cc.
0	2-v	30	71	39	.032	.098	.001	.08	3.5	15.0	....	0.0	In 0.1 cc.
0	0	*	32	20	.016	.022	.000	.08	3.0	15.0	....	...	Absent.
0	0	40	60	47	.014	.010	000	.04	4.0	10.0	....	4.0	Absent.
0	0	0	45	34	.002	.004	.000	.08	4.0	9.0	....	0.1	Absent.
60	1-e	40	74	44	.018	.018	.001	.12	3.5	11.0	....	5.0	Absent.
0	0	0	50	36	.006	.018	.002	.08	3.5	12.0	....	0.3	Absent.
0	Dis.	70	72	60	.072	.046	.001	.00	4.0	23.0	....	6.2	Absent.
0	0	0	42	14	.084	.048	.000	.16	3.5	8.0	....	0.0	In 10.0 cc.
0	1-e	25	....	....	.056	.024	.000	1.00	2.5	.....	....	0.4	Absent.
0	1-e	100	104	67	.048	.122	.001	.00	4.0	19.0	....	3.4	Absent.
60	1-e	*	54	26	.050	.154	.001	.64	4.0	17.0	....	0.0	In 10.0 cc.
0	0	0	46	24	.014	.034	.000	.36	4.0	11.0	....	0.0	Absent.
0	1-e	0	45	20	.014	.062	000	.44	4.0	13.0	....	0.1	Absent.
0	0	0	30	17	.008	.024	000	.24	2.5	16.0	....	0.0	Absent.
0	0	0	49	27	.006	.018	.000	.28	4.0	14.0	....	0.2	Absent.
0	1-v	70	66	53	.078	.020	.000	.04	4.0	42.0	....	0.3	Absent.
0	1-e	0	26	9	.010	.016	.000	1.92	4.0	9.0	....	0.0	Absent.
							.000	1.20	4.0	4.0	....	0.0	Absent.
0	2-e	0	20	8	.012	.044							
0	1-v	0	....	....	.032	.028	.015	2.00	11.0	.....	....	...	Absent.
0	0	0	....	....	.034	.036	.003	1.00	11.0	.....	....	...	Absent.
0	1-v	0	157	126	.012	.044	.000	.80	8.0	120.0	....	0.0	Absent.
0	1-e	35	400	375	.004	.024	.001	.10	77.0	215.0	....	0.3	In 10.0 cc.
0	0	*	293	273	.320	....	.005	.00	51.0	165.0	....	0.6	In 10.0 cc.
0	0.	0	389	360	.290	.046	.004	.04	75.0	207.0	....	0.0	Absent.
20	2-v	*	295	259	.118	.016	.006	.08	49.0	161.0	....	0.7	Absent.
0	1-e	0	410	....	.080	.016	.006	.12	76.5	219.0	....	0.4	Absent.
0	1-e	0	299	....	.380	.056	.007	.00	53.0	163.0	....	1.0	In 1.0 cc.
0	1-e	25	303	204	.266	.024	.017	.00	52.0	187.0	....	0.2	In 1.0 cc.
0	1-e	*	401	269	.032	.066	.000	.12	78.0	237.0	....	0.0	Absent.
0	0	0	150	124	.026	.090	.012	.48	4.0	70.0	....	0.2	Absent.
0	2-m	0	160	130	.006	.034	.002	.08	5.0	60.0	....	0.0	In 1.0 cc.
10	2-e	*	145	78	.010	.060	.003	.00	4.0	73.0	....	0.6	Absent.
0	1-v	0	149	104	.038	.066	.000	.08	4.5	120.0	....	0.1	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	0	*	197	182	.012	.042	.000	2.40	6.5	101.0	....	0.1	Absent.
0	0	*	200	182	.010	.014	.000	0.12	7.0	123.0	....	0.2	In 10.0 cc.
0	0	0	222	179	.004	.016	.003	.80	6.5	145.0	....	0.1	In 10.0 cc.
0	0	40	203	130	.032	.072	.001	.08	7.0	129.0	....	0.2	In 0.1 cc.
120	1-v	0	46	19	.012	.110	.000	.08	3.5	‡	....	0.2	In 1.0 cc.
100	1-v	0	43	27	.018	.090	.000	.08	4.0	‡	....	0.1	In 10.0 cc.
0	1-v	0	50	28	.004	.016	.001	.00	4.0	‡	....	0.0	Absent.
0	1-v	0	50	25	.008	.020	.001	.00	3.5	‡	....	0.0	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Millville	Jan. 9, 1912	Well water, filtered, Millville Water Co.
Millville	Jan. 15, 1912	Raw water, Millville Water Co.
Millville	Jan. 15, 1912	Tap, raw water, People's Water Co.
Millville	Jan. 15, 1912	Tap, filtered water People's Water Co.
Millville	Jan. 15, 1912	Tap, filtered water, Millville Water Co.
Millville	April 3, 1912	Raw water, Millville Water Co.
Millville	April 3, 1912	Water entering filters, Millville Water Co.
Millville	April 3, 1912	Tap, Millville Water Co.
Millville	April 15, 1912	Raw water, People's Water Co
Millville	April 15, 1912	Tap, filtered water, People's Water Co.
Millville	April 15, 1912	Raw water, Millville Water Co.
Millville	April 15, 1912	Tap, filtered water, Millville Water Co.
Millville	May 16, 1912	Raw water
Millville	May 16, 1912	Water from filter No. 1, Millville Water Co.
Millville	May 16, 1912	Water from filter No. 4, Millville Water Co.
Millville	May 16, 1912	Tap, Millville Water Co.
Millville	July 1, 1912	Tap, People's Water Co.
Millville	July 1, 1912	Tap, People's Water Co.
Millville	July 1, 1912	Raw water, Millville Water Co.
Millville	July 1, 1912	Tap, Millville Water Co.
Millville	Aug. 6, 1912	Tap, Millville Water Co.
Millville	Aug. 6, 1912	Tap, People's Water Co.
Millville	Aug. 23, 1912	Raw water, Millville Water Co.
Millville	Aug. 23, 1912	Tap, Millville Water Co.
Millville	Sept. 6, 1912	Raw water, Millville Water Co.
Millville	Sept. 6, 1912	Tap, filtered water, Millville Water Co.
Millville	Sept. 26, 1912	Raw water, Millville Water Co.
Millville	Sept. 26, 1912	Tap, filtered water, Millville Water Co.
Millville	Oct. 21, 1912	Tap, raw water, People's Water Co.
Millville	Oct. 21, 1912	Tap, filtered water, People's Water Co.
Millville	Oct. 21, 1912	Raw water, Millville Water Co.
Millville	Oct. 21, 1912	Tap, filtered water, Millville Water Co.
Montclair	Jan. 19, 1912	Tap
Montclair	July 10, 1912	Tap
Moorestown	Dec. 5, 1911	Raw water
Moorestown	Dec. 5, 1911	Tap, filtered water
Moorestown	Dec. 6, 1911	Raw water
Moorestown	Dec. 8, 1911	Tap, filtered water
Moorestown	Dec. 8, 1911	Raw water
Moorestown	Dec. 9, 1911	Water entering filters
Moorestown	Dec. 9, 1911	Spring-fed reservoir
Moorestown	Dec. 9, 1911	Tap, filtered water
Moorestown	Jan. 29, 1912	Raw water
Moorestown	Jan. 29, 1912	Tap, filtered water
Moorestown	Mch. 6, 1912	Raw water
Moorestown	Mch. 6, 1912	Tap, filtered water
Moorestown	Mch. 19, 1912	Tap
Moorestown	June 14, 1912	Raw water
Moorestown	June 14, 1912	Tap, filtered water
Moorestown	July 18, 1912	Tap

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.	Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
....	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc
80	3–v	0	50	32	.084	.084	.000	.12	4.0	‡	....	0.3	In 10.0 cc.
0	1–v	0	45	16	.028	.048	.003	.00	4.0	‡	....	0.2	Absent.
0	1–v	0	44	19	.018	.046	.000	.04	4.0	‡	....	0.2	Absent.
125	3–v	0	42	12	.139	.102	.000	.04	4.0	‡	....	0.3	In 10.0 cc.
...	....	.....	....	....	...	....	....	....	....	4.0	....	...	In 10.0 cc.
...	....	.....	....	....	...	....	....	....	....	1.0	....	...	In 0.1 cc.
...	....	.....	....	....	...	....	....	....	....	1.0	....	...	In 10.0 cc.
0	0	0	....	....	.012	.026	.006	.00	4.5	0.0	....	...	Absent.
0	0	0	....	....	.012	.020	.001	.00	4.5	0.0	....	...	Absent.
80	3–v	0	....	....	.012	.114	.000	.00	4.5	2.0	....	...	In 0.1 cc.
80	3–v	0	45	12	.016	.080	.000	.04	4.5	0.0	....	0.4	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	1–e	0	....	....	.012	.032	.001	.00	5.0	0.0	....	...	Absent.
0	1–e	0	45	33	.006	.032	.002	.00	5.0	0.0	....	0.0	Absent.
120	1–e	*	40	9	.050	.160	.000	.00	5.0	0.0	....	0.1	In 10.0 cc.
50	1–e	*	34	12	.028	.100	.000	.00	4.5	5.0	....	0.1	In 10.0 cc.
140	1–e	*	....	....	.046	.224	.000	.00	4.5	9.0	....	...	Absent.
0	1–e	0	....	....	.018	.044	.003	.00	4.5	1.0	....	...	Absent.
100	1–e	*	60	6	.036	.170	.000	.00	4.5	12.0	6.3	0.0	In 1.0 cc.
50	1–e	*	46	4	.034	.100	.000	.00	4.5	12.0	28.4	0.0	Absent.
0	1–e	*	60	30	.012	.076	.001	.12	4.5	9.0	....	1.1	In 10.0 cc
0	1–e	0	65	40	.016	.070	.000	.00	4.5	11.0	....	0.4	Absent.
40	1–e	*	25	10	.064	.120	.000	.04	7.5	5.0	....	0.1	In 1.0 cc.
35	1–e	0	62	29	.006	.098	.000	.04	7.5	12.0	....	0.1	In 1.0 cc.
0	1–e	0	41	16	.012	.016	.000	.00	5.0	0.0	....	0.0	Absent.
0	0	0	40	18	.012	.012	.000	.00	5.0	‡	....	0.7	Absent.
30	2–e	*	35	9	.022	.170	.001	.08	6.0	1.0	....	0.0	In 10.0 cc.
10	0	*	47	19	.028	.124	.001	.08	6.0	8.0	....	0.1	In 10.0 cc.
0	2–e	0	....	....	.036	.054	.001	.00	5.0	.....	....	...	Absent.
0	0	0	....	....	.050	.122	.007	.04	7.5	.....	....	...	In 10.0 cc.
20	2–e	*	....	....	.074	.068	.005	2.80	9.5	8.0	....	...	Absent.
0	0	0	....	....	.040	.044	.002	2.80	9.5	6.0	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	0	25	97	57	.098	.080	.002	.40	10.5	11.0	....	1.0	In 1.0 cc.
0	0	0	109	71	.088	.054	.002	.24	10.5	9.0	....	0.2	In 10.0 cc.
0	0	25	114	90	.100	.090	.003	.16	10.5	5.0	....	0.8	In 10.0 cc.
0	0	0	92	72	.024	.084	.001	.00	10.5	11.0	....	0.2	Absent.
0	0	0	....	....	.050	.068	.004	2.00	10.0	.....	....	...	Absent.
30	0	25	187	165	.054	.100	.007	.08	11.0	6.0	....	0.3	In 0.1 cc.
0	0	0	114	56	.008	.022	.002	.00	11.0	10.0	....	0.0	Absent.
0	1–e	*	....	....	.028	.076	.002	.84	8.0	.....	....	...	In 10.0 cc

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Moorestown	July 26, 1912	Raw water
Moorestown	July 26, 1912	Tap, filtered water
Moorestown	July 29, 1912	Tap
Moorestown	Aug. 5, 1912	Tap, filtered water
Moorestown	Aug. 6, 1912	Reservoir in woods
Moorestown	Aug. 6, 1912	Raw water
Moorestown	Aug. 6, 1912	Tap
Moorestown	Aug. 7, 1912	Raw water
Moorestown	Aug. 7, 1912	Tap
Moorestown	Aug. 8, 1912	Tap
Moorestown	Sept. 13, 1912	Raw water
Moorestown	Sept. 13, 1912	Tap, filtered water
Moorestown	Sept. 26, 1912	Tap, filtered water
Moorestown	Oct. 11, 1912	Raw water
Moorestown	Oct. 11, 1912	Tap
Moorestown	Oct. 22, 1912	Tap, filtered water
Moorestown	Oct. 22, 1912	Raw water
Morristown	Nov. 6, 1911	Tap
Morristown	Feb. 5, 1912	Tap
Morristown	May 2, 1912	Tap
Morristown	Aug. 26, 1912	Tap
Mountain Lakes	Nov. 8, 1911	Reservoir
Mountain Lakes	Mch. 11, 1912	Well
Mountain Lakes	Mch. 11, 1912	Tap
Mountain Lakes	May 4, 1912	Tap
Mountain Lakes	Aug. 29, 1912	Tap
Mount Holly	Dec. 6, 1911	Stream
Mount Holly	Dec. 6, 1911	Tap, filtered water
Mount Holly	Feb. 7, 1912	Stream
Mount Holly	Feb. 7, 1912	Tap, filtered water
Mount Holly	Feb. 7, 1912	Tap
Mount Holly	Mch. 7, 1912	Raw water
Mount Holly	Mch. 7, 1912	Tap, filtered water
Mount Holly	Mch. 7, 1912	Tap
Mount Holly	Mch. 12, 1912	Tap, filtered water
Mount Holly	April 29, 1912	Raw water
Mount Holly	April 29, 1912	Tap
Mount Holly	May 28, 1912	Raw water
Mount Holly	May 28, 1912	Tap
Mount Holly	June 17, 1912	Raw water
Mount Holly	June 17, 1912	Tap, filtered water
Mount Holly	July 26, 1912	Raw water
Mount Holly	July 26, 1912	Tap, filtered water
Mount Holly	Aug. 7, 1912	Raw water
Mount Holly	Aug. 7, 1912	Tap
Mount Holly	Aug. 15, 1912	Tap, filtered water
Mount Holly	Sept. 9, 1912	Raw water
Mount Holly	Sept. 9, 1912	Tap
Mount Holly	Oct. 22, 1912	Raw water
Mount Holly	Oct. 22, 1912	Tap, filtered water

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia	Alb. Ammonia	Nitrites.	Nitrates.					
0	2-v	*	152	84	.106	.138	.007	.80	10.0	9.0	....	0.3	In 0.1 cc.
0	0	0	132	109	.032	.092	.001	1.60	10.5	10.0	....	0.0	In1 0.0 cc
0	1-e	*	....	....	.076	.084	.002	.00	11.5	....	....	...	In 10.0 cc.
0	0	0	....	....	.032	.102	.000	.40	12.0	26.0	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	....	....	...	Absent.
0	1-e	25	117	70	.108	.164	.006	.84	11.0	27.0	....	0.2	In 0.1 cc.
0	0	0	134	91	.030	.098	.000	1.12	11.0	88.0	....	0.0	Absent.
0	0	0	....	....	.018	.082	.000	.64	13.0	.....	....	...	Absent.
0	1-e	50	110	68	.150	.128	.012	1.40	13.0	16.0	....	0.2	In 0.1 cc.
0	0	0	122	76	.032	.100	.000	1.68	13.0	24.0	....	0.0	Absent.
20	0	*	68	42	.032	.098	.000	1.60	10.0	15.0	....	0.1	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	0	*	....	....	.012	.038	.000	.60	11.0	12.0	....	...	Absent.
0	2-e	40	....	....	.082	.094	.007	.40	11.0	18.0	....	...	In 1.0 cc.
35	0	25	48	23	.020	.082	.001	.00	2.5	19.0	....	3.5	In 10.0 cc.
0	0	*	40	30	.008	.016	.000	.04	3.0	15.0	....	0.4	Absent.
0	0	*	68	43	.004	.012	.000	.20	2.5	14.0	....	0.0	In 1.0 cc.
0	1-e	0	50	42	.030	.074	.001	.00	5.0	32.0	....	0.0	In 1.0 cc.
0	0	0	....	....	.006	.022	.002	.00	4.0	52.0	....	...	In 10.0 cc.
0	2-e	0	90	76	.020	.038	.000	.00	3.5	50.0	....	0.0	Absent.
0	2-e	0	97	75	.006	.016	.000	.00	3.5	48.0	....	0.0	Absent.
0	0	0	105	72	.014	.022	.000	.00	3.5	51.0	....	0.5	Absent.
0	1-v	0	....	....	.010	.028	.000	.00	4.5	80.0	....	...	In 10.0 cc.
90	1-v	*	53	39	.084	.100	.000	.00	4.0	.....	....	0.7	In 1.0 cc.
70	1-v	*	58	27	.026	.094	.000	.00	4.0	.....	....	0.7	In 10.0 cc.
60	1-v	*	.....	....	.062	.164	.003	.12	3.5	‡	16.9	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
40	1-v	0	....	....	.022	.080	.000	.04	3.5	‡	18.2	...	In 10.0 cc.
50	2-v	0	60	26	.034	.080	.000	.00	3.5	‡	9.5	0.4	In 1.0 cc.
30	2-v	*	60	30	.036	.078	.002	.00	4.0	3.0	7.9	0.4	In 6.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 20.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
200	3-v	*	45	15	.048	.110	.001	.08	3.5	2.0	....	3.0	In 0.1 cc.
150	1-v	*	74	53	.020	.050	.001	.00	4.5	8.0	....	0.4	Absent.
300	1-e	*	68	15	.068	.184	.000	.00	3.5	0.0	...	0.2	In 0.1 cc.
0	1-e	*	90	56	.030	.100	.001	.00	4.0	2.0	....	0.1	In 1.0 cc.
280	0	*	65	44	.106	.180	.001	.20	5.0	4.0	....	0.1	In 1.0 cc.
50	0	*	84	58	.084	.118	.000	.08	5.0	15.0	....	0.1	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	....	....	...	In 0.1 cc.
150	1-e	0	55	26	.080	.134	.000	.12	7.0	3.0	....	0.3	In 0.1 cc.
0	1-e	0	86	65	.060	.098	.000	.04	7.0	18.0	....	0.0	In 10.0 cc.
80	2-e	*	....	....	.024	.170	.000	.08	5.5	2.0	....	...	In 1.0 cc.
0	1-e	0	....	....	.012	.052	.000	.00	5.5	17.0	....	...	Absent.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC
Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Mount Tabor	April 5, 1912.....	Tap .....
Mount Tabor	July 24, 1912.....	Tap .....
Mount Tabor	Oct. 5, 1912.....	Tap .....
Mullica Hill	Feb. 19, 1912.....	Tap .....
Mullica Hill	Mch. 18, 1912.....	Tap .....
Mullica Hill	Mch. 20, 1912.....	Tap .....
Mullica Hill	Mch. 20, 1912.....	Tap .....
Mullica Hill	May 20, 1912.....	Tap .....
Mullica Hill	June 11, 1912.....	Well farthest from building.....
Mullica Hill	June 11, 1912.....	Well near building .....
Mullica Hill	July 8, 1912.....	Tap, well No. 2 .....
Mullica Hill	July 8, 1912.....	Tap .....
Mullica Hill	Aug. 8, 1912.....	Tap .....
National Park	Feb. 28, 1912.....	Tap .....
National Park	April 12, 1912.....	Tap .....
National Park	July 2, 1912.....	Tap .....
National Park	Oct. 25, 1912.....	Tap .....
Naughright	Dec. 6, 1911.....	Tap .....
Neptune Township.	Dec. 4, 1911.....	Raw water .....
Neptune Township.	Dec. 4, 1911.....	Tap .....
Neptune Township.	May 9, 1912.....	Raw water .....
Neptune Township.	May 9, 1912.....	Tap, filtered water .....
Netcong	Feb. 1, 1912.....	Tap .....
Netcong	May 2, 1912.....	Tap .....
Netcong	May 11, 1912.....	Tap .....
Netcong	Sept. 4, 1912...	Tap .....
Newark	Dec. 2, 1911.....	Tap .....
Newark	Mch. 21, 1912.....	Tap .....
Newark	June 10, 1912.....	Tap .....
Newark	June 14, 1912.....	Tap .....
Newark	July 5, 1912.....	Cedar Grove reservoir .....
Newark	July 5, 1912.....	Cedar Grove reservoir .....
Newark	July 5, 1912.....	Cedar Grove reservoir .....
Newark	July 5, 1912.....	Cedar Grove reservoir .....
Newark	July 24, 1912.....	Macopin intake .....
Newark	July 24, 1912.....	Echo Lake reservoir .....
Newark	July 24, 1912.....	Clinton reservoir .....
Newark	July 24, 1912.....	Canistear reservoir .....
Newark	July 24, 1912.....	Oak Ridge reservoir .....
Newark	July 25, 1912.....	Cedar Grove reservoir .....
Newark	Sept. 5, 1912.....	Tap .....
Newark, East	Jan. 4, 1912.....	Tap .....
New Brunswick ...	Nov. 15, 1911.....	Tap .....
New Brunswick ...	Nov. 16, 1911.....	Tap .....
New Brunswick ...	Feb. 9, 1912.....	Tap .....
New Brunswick ...	May 8, 1912.....	Tap .....
New Brunswick ...	July 20, 1912.....	Tap .....
New Brunswick ...	Aug. 6, 1912.....	Tap .....
New Brunswick ...	Sept. 5, 1912.....	Tap .....
New Brunswick ...	Oct. 8, 1912.....	Tap .....

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
0	2-e	0	70	58	.004	.010	.000	.72	5.0	16.0	....	...	Absent.
0	0	0	....	....	.006	.028	.000	.24	5.5	42.0	....	...	Absent.
0	0	0	84	56	.012	.030	.000	.48	6.5	39.0	....	0.0	Absent.
0	0	0	368	348	.138	.042	.015	.04	37.0	268.0	....	0.6	In 10.0 cc.
0	1-e	0	573	532	.Ppt	.076	.002	.04	37.0	257.0	....	...	Absent.
0	0	0	....	....	.450	.120	.004	.00	37.5	267.0	....	...	Absent.
0	0	0	546	511	.470	.140	.006	.00	37.0	259.0	....	0.0	Absent.
0	0	0	558	490	.340	.080	.024	.00	37.0	103.0	....	0.0	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	..	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	..	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	..	In 10.0 cc.
0	1-e	0	....	....	.190	.080	.003	.08	45.0	391.0	....	...	Absent.
0	1-e	0	109	78	.074	.034	.006	3.20	10.0	2.0	....	0.6	Absent.
15	1-m	*	118	64	.010	.022	.011	5.60	10.0	9.0	....	0.2	Absent.
0	0	*	....	....	.054	.040	.015	6.40	9.5	4.0	....	...	Absent.
0	0	0	77	11	.068	.014	.004	4.80	9.0	4.0	....	2.0	Absent.
0	0	0	128	105	.010	.022	.001	.80	4.5	.....	....	0.8	In 1.0 cc.
20	2-e	40	....	....	.048	.070	.008	.40	10.0	†	....	...	In 0.1 cc.
0	1-e	0	....	....	.020	.084	.002	.40	11.0	17.0	....	...	Absent.
25	2-e	25	122	100	.028	.030	.000	.00	3.0	43.0	....	7.0	Absent.
0	2-e	0	80	54	.002	.008	.000	.00	3.0	40.0	....	0.2	Absent.
0	....	0	80	64	.004	.010	.000	.00	2.5	41.0	....	0.6	In 10.0 cc.
10	0	*	74	60	.004	.054	.000	.00	2.5	36.0	....	0.4	Absent.
0	Of.	*	89	60	.022	.090	.003	.12	3.0	36.0	....	0.8	In 10.0 cc.
0	2-e	25	....	....	.030	.134	.003	.00	4.0	44.0	....	...	In 1.0 cc.
0	0	0	96	27	.020	.084	.000	.04	3.0	20.0	....	...	Absent.
15	1-e	*	....	....	.010	.086	.003	.08	2.5	5.0	....	...	In 10.0 cc.
5	1-e	0	....	....	.004	.048	.000	.08	2.5	14.0	....	...	In 0.1 cc.
10	0	0	....	....	.006	.066	.002	.00	2.5	.....	....	...	Absent.
..	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
..	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
.	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
10	2-e	*	....	....	.044	.064	.001	.00	2.0	27.0	....	...	Absent.
20	0	*	....	....	.022	.130	.000	.04	2.0	14.0	....	...	Absent.
0	0	0	....	....	.014	.060	.001	.80	2.5	7.0	....	...	In 10.0 cc.
0	0	0	....	....	.016	.074	.000	.04	2.0	16.0	....	...	Absent.
10	2-e	*	....	....	.056	.130	.000	.04	1.5	22.0	....	...	In 1.0 cc.
0	1-e	*	....	....	.034	.074	.000	.00	2.0	19.0	....	...	In 10.0 cc.
0	2-e	0	....	....	.026	.096	.000	.04	4.5	25.0	....	...	In 10.0 cc.
10	1-e	0	....	....	.026	.080	.001	.04	5.0	10.0	....	...	Absent.
25	1-v	*	....	....	.010	.080	.000	.08	7.5	.....	....	...	In 1.0 cc.
20	2-v	25	85	58	.044	.114	.000	.08	7.5	3.0	....	0.3	In 10.0 cc.
10	1-e	*	55	35	.100	.126	.002	.12	6.0	8.0	....	0.8	In 10.0 cc.
50	1-e	*	....	....	.026	.100	.000	.08	5.5	3.0	....	...	In 10.0 cc
65	1-v	*	....	....	.048	.084	.001	.08	6.5	6.0	....	...	In 10.0 cc.
40	1-e	0	....	....	.058	.232	.000	.08	6.0	10.0	....	...	In 10.0 cc.
20	2-e	*	....	....	.060	.140	.003	.04	8.5	16.0	....	...	Absent.
55	1-e	*	....	....	.088	.116	.000	.00	8.0	5.0	....	...	In 10.0 cc.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
New Egypt	Dec. 15, 1911	Tap
New Egypt	Mch. 25, 1912	Tap
New Egypt	June 18, 1912	Tap
New Egypt	Sept. 28, 1912	Tap
New Lisbon	Dec. 15, 1911	Tap
New Lisbon	Mch. 20, 1912	Tap
New Lisbon	June 18, 1912	Stream
New Lisbon	June 18, 1912	Tap
New Lisbon	Sept. 10, 1912	Tap
New Milford	Aug. 31, 1912	Tap, raw water
New Milford	Aug. 31, 1912	Tap, filtered water
New Milford	Sept. 28, 1912	Tap, raw water
New Milford	Sept. 28, 1912	Tap, filtered water
Newton	Dec. 5, 1911	Tap
Newton	Mch. 6, 1912	Tap
Newton	Sept. 27, 1912	Tap
Normandy Heights.	May 1, 1912	Tap
Normandy Heights.	Aug. 26, 1912	Tap
Oaklyn	June 25, 1912	Tap
Ocean City	Jan. 2, 1912	Tap
Ocean City	April 6, 1912	Tap
Ocean City	July 3, 1912	Tap
Ocean City	July 17, 1912	Well No. 4
Ocean City	July 17, 1912	Well No. 5
Ocean City	July 17, 1912	Tap
Ocean City	Oct. 23, 1912	Tap
Ocean Grove	Nov. 20, 1911	Tap, Ocean Grove Camp Meeting Association
Ocean Grove	Feb. 14, 1912	Reservoir, filtered water, Asbury Park supply.
Ocean Grove	July 29, 1912	Raw water from reservoir, Asbury Park supply
Ocean Grove	July 29, 1912	Tap, filtered water, Asbury Park supply
Ocean Grove	Aug. 8, 1912	Tap, Ocean Grove Camp Meeting Association.
Orange	Nov. 10, 1911	Tap
Orange	Nov. 16, 1911	Well 80 ft.
Orange	Jan. 5, 1912	Tap
Orange	Mch. 1, 1912	Tap
Orange	April 3, 1912	Tap
Orange	April 4, 1912	Tap
Orange	May 23, 1912	Tap
Orange	July 9, 1912	Tap
Orange	July 23, 1912	Tap
Orange	Aug. 19, 1912	Tap
Orange	Sept. 16, 1912	Tap
Orange	Oct. 4, 1912	Tap
Orange, East	Jan. 5, 1912	Tap
Orange, East	April 4, 1912	Tap
Orange, East	May 15, 1912	Tap
Orange, East	July 27, 1912	Tap
Orange, East	Oct. 4, 1912	Tap
Orange, East	Oct. 15, 1912	Well 6x36 ft.
Passaic	April 22, 1912	Tap

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
0	0	25	....	....	.016	.014	.002	.00	3.5	72.0	....	...	In 10.0 cc.
0	1-e	0	122	90	.018	.020	.007	.00	3.5	70.0	....	0.2	Absent.
0	0	*	111	93	.020	.096	.000	.00	3.0	72.0	....	0.5	Absent.
0	0	*	114	72	.022	.038	.001	.00	4.0	73.0	....	0.1	In 1.0 cc.
60	2-v	*	....	....	.018	.052	.004	.08	4.0	0.0	....	...	In 10.0 cc.
70	3-v	*	96	12	.016	.078	.000	.00	3.0	‡	....	0.3	In 10.0 cc.
150	1-v	0	....	....	.062	.150	.000	.00	3.5	‡	....	...	In 0.1 cc.
140	1-v	0	48	6	.046	.146	.000	.00	3.5	‡	....	3.5	In 0.1 cc.
200	2-e	*	....	....	.064	.164	.000	.08	7.5	4.0	....	...	In 10.0 cc.
0	0	80	166	109	.070	.160	.001	.00	6.0	82.0	....	0.3	In 1.0 cc.
0	0	0	135	91	.050	.104	.000	.00	6.0	78.0	....	0.0	Absent.
0	1-e	60	217	141	.058	.152	.001	.16	7.0	55.0	....	4.5	In 0.1 cc.
0	0	0	91	26	.032	.072	.000	.08	7.5	39.0	....	0.1	Absent.
0	0	0	50	42	.010	.056	.001	.00	2.5	23.0	....	0.1	In 10.0 cc.
0	0	0	84	62	.004	.032	.000	.00	2.0	25.0	....	0.0	In 10.0 cc.
0	2-v	0	....	....	.020	.072	.000	.00	3.0	.....	....	...	In 10.0 cc.
0	0	0	150	126	.002	.008	.008	1.32	6.5	93.0	....	0.0	Absent.
0	0	0	153	125	.022	.042	.010	1.60	7.5	143.0	....	0.0	Absent.
0	2-v	0	....	....	.014	.066	.002	1.60	6.0	4.0	....	...	Absent.
0	1-e	0	116	98	.090	....	.003	.00	8.0	61.0	....	0.0	Absent.
0	0	*	128	105	.022	.014	.010	.00	7.5	60.0	....	0.2	Absent.
0	1-e	0	184	102	.016	.042	.001	.04	6.5	65.0	....	0.0	In 1.0 cc.
0	0	0	....	....	.204	.018	.002	.04	9.0	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	0	*	132	101	.008	.010	.000	.08	8.5	65.0	....	0.0	In 1.0 cc.
0	0	0	142	114	....	....	.010	.04	2.0	74.0	....	0.1	Absent.
0	0	0	....	....	.070	.024	.007	.00	3.0	76.0	....	...	Absent.
0	2-e	100	69	58	.074	.032	.000	.00	3.0	34.0	....	9.0	Absent.
0	0	0	....	....	.022	.072	.000	.00	3.5	35.0	....	...	Absent.
0	0	0	....	....	.162	.028	.020	.00	4.5	118.0	....	...	Absent.
25	1-v	*	....	....	.030	.078	.000	.16	5.5	21.0	....	...	In 1.0 cc.
0	2-e	0	....	....	.004	.018	.000	.08	5.5	.....	22.1	0.1	Absent.
0	0	25	92	52	.014	.054	.001	.12	5.0	2.0	....	...	
0	1-e	25	....	....	.060	.090	.005	.12	5.0	12.0	....	...	In 1.0 cc.
20	2-e	30	....	....	.040	.026	.007	.20	4.5	10.0	....	...	In 10.0 cc.
0	2-e	25	65	60	.054	.060	.007	.20	4.5	13.0	....	0.5	In 10.0 cc.
10	1-e	*	....	....	.028	.050	.000	.00	5.0	31.0	....	...	In 1.0 cc.
0	1-e	*	100	68	.048	.074	.002	.08	5.5	41.0	....	0.6	In 10.0 cc.
0	0	0	....	....	.028	.030	.002	.08	4.0	41.0	....	...	In 0.1 cc.
0	2-v	*	....	....	.086	.116	.004	.24	6.0	.....	....	...	In 1.0 cc.
0	1-e	*	100	60	.054	.130	.003	.28	5.5	45.0	....	0.0	In 0.1 cc.
0	2-v	30	96	66	.072	.126	.000	.16	6.0	38.0	....	0.1	In 10.0 cc.
0	1-e	*	196	136	.016	.008	.000	.16	6.5	97.0	....	...	Absent.
0	2-e	*	184	154	.006	.008	.000	.40	6.0	80.0	....	1.0	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	2-e	0	136	125	.012	.014	.000	.36	5.5	83.0	....	0.2	In 10.0 cc.
0	0	0	174	67	.038	.030	.000	.24	6.5	86.0	....	0.0	Absent.
0	0	0	....	....	.048	.016	.015	.04	6.0	.....	....	...	In 10.0 cc.
0	1-v	0	....	....	.014	.034	.005	.04	3.0	.....	....	...	Absent.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Paterson	April 2, 1912	Tap
Paterson	July 18, 1912	Tap
Paulsboro	Dec. 1, 1911	Tap
Paulsboro	Mch. 18, 1912	Tap
Paulsboro	June 18, 1912	Tap
Paulsboro	June 20, 1912	Tap
Paulsboro	Sept. 5, 1912	Tap
Pemberton	Dec. 15, 1911	Tap
Pemberton	Mch. 7, 1912	Tap
Pemberton	June 18, 1912	Tap
Pemberton	Sept. 9, 1912	Tap
Pennington	Jan. 10, 1912	Tap
Pennington	April 11, 1912	Tap
Pennington	April 26, 1912	Brook feeding reservoir
Pennington	April 26, 1912	Reservoir
Pennington	July 13, 1912	Tap
Pennington	July 25, 1912	Well 186 ft.
Pennington	July 25, 1912	Reservoir on Sked farm
Pennington	July 25, 1912	Reservoir on Golden farm
Pennington	Oct. 7, 1912	Tap
Pennsgrove	Dec. 8, 1911	Raw water
Pennsgrove	Dec. 8, 1911	Tap, filtered water
Pennsgrove	Mch. 18, 1912	Wells
Pennsgrove	Mch. 18, 1912	Tap, filtered water
Pennsgrove	June 20, 1912	Tap
Pennsgrove	Aug. 8, 1912	Tap
Pennsgrove	Sept. 5, 1912	Raw water
Pennsgrove	Sept. 5, 1912	Tap, filtered water
Perkintown	Sept. 26, 1912	Raw water
Perkintown	Sept. 26, 1912	Tap, filtered water
Pensauken	Nov. 11, 1911	Tap
Pensauken	Feb. 16, 1912	Tap
Pensauken	May 24, 1912	Tap
Pensauken	Aug. 15, 1912	Tap
Perth Amboy	Nov. 20, 1911	Tap
Perth Amboy	Feb. 15, 1912	Tap
Perth Amboy	May 9, 1912	Tap
Perth Amboy	July 10, 1912	75 ft. well
Perth Amboy	Aug. 10, 1912	Tap
Phillipsburg	Nov. 11, 1911	Tap, People's Co.
Phillipsburg	Nov. 11, 1911	Tap, Lopatcong Co.
Phillipsburg	Feb. 2, 1912	Tap, Lopatcong Co.
Phillipsburg	Feb. 2, 1912	Tap, People's Co.
Phillipsburg	May 3, 1912	Tap, Lehigh Co.
Phillipsburg	May 3, 1912	Tap, Lopatcong Co.
Phillipsburg	May 3, 1912	Tap, People's Co
Phillipsburg	Aug. 28, 1912	Tap, People's Co.
Phillipsburg	Aug. 28, 1912	Tap, Lopatcong Co.
Phillipsburg	Aug. 28, 1912	Tap, Lehigh Co.
Phillipsburg	Sept. 6, 1912	Tap, Lehigh Co.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.	Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
0	3-e	*	58	40	.016	.082	.001	.00	4.0	.....	....	0.2	In 10.0 cc.
0	2-e	0	106	76	.028	.064	.001	.08	8.5	34.0	....	0.0	Absent.
100	Dis.	200	128	110	.400	....	.050	5.60	9.0	16.0	....	2.5	Absent.
0	1-v	*	112	76	.048	.026	.003	8.00	10.5	0.0	....	0.3	Absent.
0	0	0	118	42	.074	.046	.001	2.80	11.0	3.0	....	0.4	Absent.
0	2-e	0	....	....	.056	.058	.006	5.60	11.0	0.0	....	...	Absent.
0	1-v	*	114	58	Ppt.	.004	.005	.04	12.0	3.0	....	...	Absent.
40	1-v	*	....	....	.014	.060	.000	.04	3.5	0.0	....	...	In 1.0 cc.
30	2-v	0	50	24	.016	.080	.000	.08	3.5	‡	....	0.4	In 10.0 cc.
140	1-v	0	42	8	.054	.140	.000	3.20	4.5	‡	....	2.8	In 0.1 cc.
180	2-e	0	47	11	.068	.112	.000	.16	6.0	6.0	....	0.4	Absent.
0	2-e	0	82	58	.026	.034	.001	.00	5.6	26.0	....	...	Absent.
0	0	*	....	....	.020	.054	.001	.00	4.0	28.0	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
0	1-e	0	112	80	.082	.048	.000	.04	6.0	57.0	....	0.1	In 1.0 cc.
0	1-v	0	....	....	.020	.066	.000	.04	4.5	52.0	....	...	In 10.0 cc.
0	1-e	*	....	....	.018	.106	.000	.00	4.5	55.0	....	...	In 1.0 cc.
0	1-v	0	....	....	.036	.098	.000	.04	4.5	51.0	....	...	In 0.1 cc.
0	1-v	*	....	....	.014	.054	.000	.00	4.5	65.0	....	...	In 0.1 cc.
0	1-e	†	68	40	.210	.070	.000	.00	5.0	.....	....	3.5	Absent.
0	0	0	60	43	.010	.028	.002	.00	6.6	.....	....	0.0	Absent.
0	0	150	85	68	.190	.034	.002	.00	5.0	38.0	....	4.0	Absent.
0	1-e	0	60	45	.006	.020	.000	.00	6.0	35.0	....	0.2	Absent.
0	1-e	0	....	....	.010	.036	.003	.00	7.0	35.0	....	...	Absent.
0	1-e	*	....	....	.018	.074	.000	.00	4.0	.....	....	...	Absent.
100	1-e	†	66	50	Ppt.	.004	.000	.00	9.0	38.0	....	...	Absent.
0	1-v	*	70	61	.004	.006	.000	5.60	7.5	45.0	....	...	Absent.
50	1-e	*	76	70	.228	.062	.000	.04	7.0	52.0	....	4.0	Absent.
0	1-e	0	68	47	.034	.044	.000	.04	6.5	36.0	....	0.1	In 10.0 cc.
0	1-e	*	108	74	Ppt.	....	.110	9.60	8.0	16.0	....	1.8	Absent.
0	0	25	90	50	.074	.048	.008	7.26	8.0	11.0	....	1.0	Absent.
0	0	0	....	....	.068	.038	.001	6.00	10.0	9.0	....	...	Absent.
0	0	0	106	68	.114	.038	.009	9.60	10.0	4.0	....	0.1	Absent.
0	0	*	40	25	.034	.024	.000	.00	5.0	0.0	....	0.2	Absent.
0	2-v	*	60	42	.072	.052	.001	.00	4.0	3.0	....	0.6	Absent.
0	0	*	50	31	.034	.024	.000	.00	4.5	4.0	....	0.7	Absent.
0	1-e	*	....	....	.020	.040	.001	.12	5.0	0.0	....	...	In 1.0 cc.
0	1-e	0	....	....	.036	.036	.000	.00	5.0	0.0	....	...	In 10.0 cc.
0	2-m	*	146	124	.020	.026	.003	1.00	3.5	94.0	....	0.1	In 1.0 cc.
20	0	*	90	78	.026	.052	002	.48	3.0	27.0	....	0.4	In 10.0 cc.
0	1-e	0	100	87	.028	.056	.005	.08	3.0	20.0	....	0.4	In 10.0 cc.
0	....	0	151	105	.006	.028	.000	.12	4.0	96.0	....	0.0	In 10.0 cc.
10	1-e	*	....	....	.008	.042	.002	.60	4.0	21.0	....	...	In 10.0 cc.
10	1-e	*	....	....	.008	.078	.001	.40	3.0	23.0	....	...	In 1.0 cc.
0	1-e	0	182	108	.008	.040	002	2.40	6.5	81.0	....	0.0	Absent.
0	1-v	*	161	116	.038	.106	.001	1.00	4.5	160.0	....	0.0	Absent.
0	Dis.	40	96	64	.096	.164	.002	.16	2.0	48.0	....	0.6	In 0.1 cc.
0	1-e	0	78	46	.040	.096	.001	.00	4.5	42.0	....	0.0	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.

† Iron ppt. * Slt. ‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Phillipsburg	Sept. 13, 1912.....	Tap, Lehigh Co. .....
Phillipsburg	Sept. 24, 1912.....	Tap, Lehigh Co. .....
Pitman	Dec. 5, 1911.....	Tap, Pitman Co. .....
Pitman	Dec. 7, 1911.....	Tap, Camp Meeting supply .....
Pitman	Mch. 19, 1912.....	Tap, Pitman Co. .....
Pitman	Mch. 19, 1912.....	Tap, Camp Meeting supply .....
Pitman	June 18, 1912.....	Tap, Pitman Co. .....
Pitman	June 18, 1912.....	Tap, Camp Meeting supply .....
Pitman	June 18, 1912.....	Tap, Pitman Co. .....
Pitman	Sept. 3, 1912.....	Tap, Pitman Co. .....
Pitman	Sept. 3, 1912.....	Tap, Camp Meeting supply .....
Plainfield	Nov. 10, 1911.....	Tap .....
Plainfield	Nov. 10, 1911.....	Tap .....
Plainfield	Dec. 11, 1911.....	Tap .....
Plainfield	Jan. 5, 1912.....	Tap .....
Plainfield	Jan. 11, 1912.....	Tap .....
Plainfield	Feb. 28, 1912.....	Tap .....
Plainfield	April 12, 1912.....	Tap .....
Plainfield	April 17, 1912.....	Tap .....
Plainfield	June 20, 1912.....	Tap .....
Plainfield	July 3, 1912.....	Tap .....
Plainfield	July 5, 1912.....	Tap .....
Plainfield	July 15, 1912.....	Tap .....
Plainfield	July 15, 1912.....	Tap .....
Plainfield	July 15, 1912.....	Tap .....
Plainfield	July 15, 1912.....	Tap .....
Plainfield	July 20, 1912.....	Tap .....
Plainfield	Aug. 2, 1912.....	Tap .....
Plainfield	Aug. 2, 1912.....	Tap .....
Plainfield	Sept. 24, 1912.....	Tap .....
Plainfield	Sept. 24, 1912.....	Tap .....
Plainfield	Oct. 8, 1912.....	Tap .....
Plainfield, South ..	Jan. 11, 1912.....	Tap .....
Plainfield, South ..	April 12, 1912.....	Raw water .....
Plainfield, South ..	May 13, 1912.....	Raw water .....
Plainfield, South ..	May 13, 1912.....	Clear water, filtered .....
Plainfield, South ..	May 23, 1912.....	Pond .....
Plainfield, South ..	July 16, 1912.....	Tap .....
Plainfield, South ..	July 31, 1912.....	Pond near intake .....
Plainfield, South ..	July 31, 1912.....	Unfiltered pond water with bleach .....
Plainfield, South ..	July 31, 1912.....	Filtered pond water with bleach .....
Plainfield, South ..	July 31, 1912.....	Filtered water with bleach .....
Plainfield, South ..	Sept. 27, 1912.....	Tap .....
Pleasantville	Jan. 2, 1912.....	Tap .....
Pleasantville	April 6, 1912.....	Tap .....
Pleasantville	July 3, 1912.....	Tap .....
Pleasantville	July 15, 1912.....	Pond .....
Pleasantville	July 16, 1912.....	Tap .....
Pleasantville	Aug. 26, 1912.....	Tap .....
Pleasantville	Aug. 26, 1912.....	Tap .....

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia.	Nitrites.	Nitrates.					
0	1–e	*	....	....	.038	.130	.000	.36	5.5	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
0	0	*	....	....	.004	.006	.000	.00	3.5	76.0	....	...	Absent.
0	0	*	116	96	.026	.050	.000	.00	3.0	.....	....	0.3	Absent.
0	1–e	0	....	....	.004	.012	.001	.00	2.5	71.0	....	...	Absent.
0	1–e	0	128	113	.014	.016	.001	.00	2.5	75.0	....	0.0	Absent.
0	1–e	0	....	....	.022	.030	.001	.00	4.0	.....	....	...	Absent.
0	0	0	....	....	.028	.034	.001	.00	4.0	.....	....	...	Absent.
0	1–e	0	....	....	.026	.040	.001	.00	4.0	.....	....	...	In 0.1 cc.
0	0	0	125	101	.014	.040	.000	.04	4.5	118.0	....	0.0	Absent.
0	0	*	132	110	.008	.028	.000	.00	4.5	124.0	....	0.0	In 10.0 cc.
0	1–e	0	....	....	.010	.036	.000	.80	6.0	.....	....	...	Absent.
0	0	0	....	....	.018	.026	.000	.72	6.0	.....	....	...	Absent.
0	0	0	196	182	.014	.028	.002	.40	5.5	118.0	....	0.1	Absent.
0	0	0	....	....	.014	.028	.000	.60	5.5	.....	....	...	Absent.
0	1–e	0	200	136	.020	.046	.002	.76	5.5	105.0	....	0.0	Absent.
0	1–e	0	....	....	.000	.008	.003	.60	6.5	108.0	95.7	...	Absent.
0	0	0	....	....	.006	.016	.000	1.20	5.5	110.0	....	...	Absent.
0	0	0	....	....	.004	.018	.004	.68	7.5	.....	....	...	Absent.
0	1–e	0	....	....	.006	.030	.002	1.00	7.5	110.0	....	...	Absent.
0	0	*	....	....	.008	.064	.056	.32	6.5	.....	....	...	Absent.
0	1–m	0	222	188	.008	.048	.003	1.12	7.0	108.0	....	0.0	In 10.0 cc.
0	1–e	0	216	176	.006	.010	.002	1.40	7.5	104.0	91.4	0.2	In 10.0 cc.
0	0	0	62	42	.016	.018	004	.96	8.5	104.0	87.1	0.0	Absent.
0	1–e	0	204	178	.004	.014	.004	1.00	8.5	92.0	80.0	0.1	Absent.
0	0	0	222	180	.008	.022	.002	.72	7.5	104.0	97.1	0.0	Absent.
0	1–v	0	228	202	.016	.034	.002	.80	6.5	118.0	....	0.0	Absent.
0	0	0	....	....	.008	.046	.000	1.00	6.5	.....	....	...	Absent.
0	0	0	....	....	.016	.076	.001	.80	7.0	.....	....	...	In 10.0 cc.
0	0	0	....	....	.010	.030	.001	1.20	9.5	.....	....	...	In 10.0 cc.
0	0	0	....	....	.026	.028	.001	1.40	8.0	.....	....	...	Absent.
0	0	0	....	....	.024	.032	.001	1.20	7.0	108.0	....	...	Absent.
0	2–e	0	322	260	.026	.034	.004	.60	8.5	106.0	....	0.1	In 1.0 cc.
0	1–e	0	....	....	.006	.014	.000	.80	7.5	97.0	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
0	2–e	*	160	105	.036	.266	.005	.00	7.0	87.0	....	0.0	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	1–e	0	152	128	.038	.156	.002	.00	8.0	87.0	....	0.0	Absent.
0	0	0	....	....	.048	.096	.000	.40	8.0	114.0	....	...	Absent.
0	0	0	158	114	.006	.022	.000	.16	7.0	107.0	....	0.1	Absent.
40	1–v	0	61	22	.018	.068	.000	.00	7.0	13.0	....	0.2	Absent.
50	2–v	0	36	8	.018	.032	.000	.00	6.5	‡	....	0.1	In 10.0 cc.
40	1–e	0	87	22	.044	.082	.001	.04	7.5	4.0	....	0.3	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
25	0	0	....	....	.048	.054	.000	.28	9.0	.....	....	...	Absent.
30	0	0	....	....	.038	.056	.000	.00	7.5	.....	....	...	In 1.0 cc.

* Slt. ‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Pleasantville	Aug. 26, 1912	Pond
Pleasantville	Oct. 23, 1912	Tap
Point Pleasant	Jan. 16, 1912	Tap
Point Pleasant	April 17, 1912	Tap
Point Pleasant	July 29, 1912	Tap
Point Pleasant	Oct. 17, 1912	Tap
Princeton	Nov. 15, 1911	Tap
Princeton	Feb. 2, 1912	Tap
Princeton	Feb. 9, 1912	Wells
Princeton	April 10, 1912	Tap
Princeton	May 4, 1912	Tap
Princeton	Aug. 2, 1912	Tap
Princeton	Aug. 14, 1912	Tap
Princeton	Sept. 16, 1912	Tap
Rahway	Nov. 16, 1911	Raw water, Mun. supply
Rahway	Nov. 16, 1911	Tap, Mun. supply
Rahway	Nov. 16, 1911	Raw water, Middlesex Co.
Rahway	Nov. 16, 1911	Tap, Middlesex Co.
Rahway	Dec. 4, 1911	Tap, filtered water, Mun. supply
Rahway	Feb. 9, 1912	Raw water, Mun. supply
Rahway	Feb. 9, 1912	Tap, filtered water, Mun. supply
Rahway	Feb. 9, 1912	Raw water, Middlesex Co.
Rahway	Feb. 9, 1912	Tap, Middlesex Co.
Rahway	May 8, 1912	Raw water, Mun. supply
Rahway	May 8, 1912	Tap, filtered water, Mun. supply
Rahway	May 8, 1912	Raw water, Middlesex Co.
Rahway	May 8, 1912	Tap, filtered water, Middlesex
Rahway	June 3, 1912	Raw water, Mun. supply
Rahway	June 3, 1912	Tap, filtered water, Mun. supply
Rahway	July 25, 1912	Raw water, Mun. supply
Rahway	July 25, 1912	Tap, filtered water, Mun. supply
Rahway	July 25, 1912	Raw water, Middlesex Co.
Rahway	July 25, 1912	Tap, filtered water, Middlesex
Rahway	Aug. 6, 1912	Raw water, Mun. supply
Rahway	Aug. 6, 1912	Tap, filtered water, Mun. supply
Rahway	Aug. 6, 1912	Raw water, Middlesex Co.
Rahway	Aug. 6, 1912	Tap, filtered water, Middlesex
Rahway	Sept. 16, 1912	Raw water, Middlesex Co.
Rahway	Sept. 16, 1912	Raw water, Mun. supply
Rahway	Sept. 16, 1912	Tap, filtered water, Mun. supply
Rahway	Sept. 16, 1912	Tap, filtered water, Middlesex
Rahway	Oct. 8, 1912	Raw water, Mun. supply
Rahway	Oct. 8, 1912	Tap, filtered water, Mun. supply
Rahway	Oct. 8, 1912	Reservoir, Middlesex Co.
Rahway	Oct. 8, 1912	Tap, filtered water, Middlesex Co.
Raritan	Jan. 11, 1912	Raw water
Raritan	Jan. 11, 1912	Tap, filtered water
Raritan	April 12, 1912	Raw water
Raritan	April 12, 1912	Tap, filtered water
Raritan	July 25, 1912	Raw water

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
30	1–e	0	....	....	.070	.080	.000	.00	7.5	.....	....	...	In 1.0 cc.
0	1–v	*	....	....	.012	.054	.001	.04	8.0	5.0	....	...	In 0.1 cc.
0	2–e	0	110	85	.160	.054	.002	.08	24.0	.....	....	...	Absent.
0	0	0	25	12	.200	.036	.001	3.60	26.5	6.0	....	0.4	Absent.
0	0	0	....	....	Ppt.	.088	.001	3.20	23.6	2.0	....	...	Absent.
0	1–v	25	130	55	.640	.048	.022	2.80	24.5	13.0	....	0.5	Absent.
0	1–e	0	132	118	.020	.048	.003	.20	5.0	70.0	....	0.3	In 10.0 cc.
0	0	0	110	90	.006	.010	.000	.00	5.0	78.0	....	0.0	Absent.
0	0	0	....	....	....	....	.000	.80	5.0	80.0	....	...	Absent.
0	2–e	*	....	....	.008	.016	.000	.28	5.5	.....	....	...	In 10.0 cc.
0	1–e	0	124	96	.002	.080	.000	.80	4.5	48.0	....	0.0	Absent.
0	0	0	36	10	.004	.060	.000	.12	5.0	101.0	....	0.0	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	0	0	134	94	.016	.050	.000	.40	5.0	88.0	....	0.0	Absent.
20	2–e	40	144	106	....	....	.008	.16	8.5	28.0	....	...	In 0.1 cc.
20	1–e	20	135	114	.084	.142	.005	.12	8.5	29.0	....	0.5	In 0.1 cc.
20	2–e	25	....	....	.070	.210	.007	.12	5.5	16.0	....	...	In 0.1 cc.
0	2–e	*	118	98	.042	.086	.002	.00	7.0	15.0	....	...	Absent.
0	1–e	*	....	....	.032	.074	.003	1.20	8.5	31.0	....	...	In 10.0 cc.
0	0	*	172	136	.070	.096	.012	.56	9.5	63.0	....	0.7	In 0.1 cc.
0	0	0	170	125	.018	.094	.009	.60	9.0	56.0	....	0.4	In 10.0 cc.
0	1–e	*	133	92	...	....	.006	.12	7.5	28.0	....	0.5	In 10.0 cc.
0	1–e	0	115	85	.064	.110	.004	.12	7.5	24.0	....	0.4	Absent.
50	1–e	40	280	214	.120	.180	.008	.08	4.0	14.0	....	5.0	In 0.1 cc.
0	0	0	108	80	.090	.090	.004	.00	7.0	23.0	....	0.0	In 10.0 cc.
50	1–e	*	100	58	.040	.140	.005	.04	4.5	23.0	....	0.6	In 0.1 cc.
0	0	0	130	70	.028	.056	.004	.00	4.5	19.0	....	0.0	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
25	1–e	*	....	....	.042	.136	.011	.04	5.0	69.0	....	...	In 0.1 cc.
0	Dis.	0	...	....	.026	.120	.000	.08	9.5	56.0	....	...	In 10.0 cc.
25	1–e	25	....	....	.116	.262	.003	.04	7.0	59.0	....	...	In 10.0 cc.
10	1–e	*	.....	...	.050	.100	.001	.04	7.0	51.0	....	...	In 0.1 cc.
0	1–e	0	....	....	.082	.194	.002	.04	10.0	109.0	....	...	In 1.0 cc.
0	1–e	0	....	....	.082	.122	.000	.08	10.0	110.0	....	...	In 1.0 cc.
25	1–e	25	....	....	.026	.350	.000	.08	8.0	93.0	....	...	In 10.0 cc.
0	1–e	0	....	....	.028	.156	.000	.12	7.5	105.0	....	...	Absent.
20	1–e	30	159	116	.058	.260	.000	.00	9.0	79.0	....	0.0	In 0.1 cc.
0	2–e	*	184	134	.056	.106	.005	.08	10.5	86.0	....	0.0	In 0.1 cc.
0	1–v	0	175	127	.044	.132	.000	.12	10.5	80.0	....	0.0	In 0.1 cc.
35	0	0	159	125	.082	.100	.000	.12	9.0	81.0	....	0.0	Absent.
20	2–e	*	196	131	.088	.100	.005	.28	8.0	75.0	....	0.1	In 0.1 cc.
0	2–e	0	187	130	.040	.068	.000	.28	9.5	68.0	....	0.0	Absent.
60	1–e	*	....	....	.062	.220	.010	.08	8.0	36.0	....	...	In 1.0 cc.
10	1–e	*	....	....	.050	.130	.000	.08	8.0	29.0	....	...	In 1.0 cc.
0	2–e	25	162	110	.020	.082	.009	68	8.5	28.0	....	0.3	In 1.0 cc.
0	2–e	*	72	42	.030	.064	.003	.64	8.5	26.0	....	0.0	In 1.0 cc.
10	1–e	*	....	.....	.008	.036	.003	.28	4.0	26.0	....	...	In 1.0 cc.
0	0	0	....	.....	.006	.022	.001	.40	4.0	19.0	....	...	Absent.
0	1–e	80	....	....	.054	.144	.006	.08	4.5	50.0	....	...	In 0.1 cc.

* Slt. ‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Raritan	July 25, 1912	Tap, filtered water
Raritan	Aug. 6, 1912	Raw water
Raritan	Aug. 6, 1912	Tap, filtered water
Raritan	Sept. 16, 1912	Raw water
Raritan	Sept. 16, 1912	Tap, filtered water
Raritan	Oct. 8, 1912	Raw water
Raritan	Oct. 8, 1912	Tap
Red Bank	Nov. 17, 1911	Tap
Red Bank	Feb. 15, 1912	Tap
Red Bank	May 10, 1912	Water from receiving tank
Red Bank	July 1, 1912	Tap
Red Bank	Aug. 9, 1912	Tap
Ridgefield	June 19, 1912	Tap
Ridgefield	July 24, 1912	Tap
Ridgefield	July 25, 1912	Tap
Ridgefield	Aug. 28, 1912	Tap
Ridgewood	Jan. 2, 1912	Tap
Ridgewood	April 2, 1912	Tap
Ridgewood	July 3, 1912	Tap
Ridgewood	July 20, 1912	Tap
Ridgewood	Aug. 12, 1912	Tap
Ridgewood	Aug. 24, 1912	Tap
Ridgewood	Sept. 3, 1912	Tap
Ridgewood	Sept. 23, 1912	Tap
Ridgewood	Oct. 16, 1912	Tap
Ridgewood	Oct. 21, 1912	Tap
Rieglesville	Dec. 13, 1911	Tap
Rieglesville	Mch. 11, 1912	Tap
Rieglesville	June 13, 1912	Tap
Rieglesville	Sept. 19, 1912	Tap
Riverside	July 11, 1912	Tap
Riverside	Oct. 10, 1912	Tap
Riverton	Jan. 2, 1912	Tap
Riverton	April 10, 1912	Tap
Riverton	July 11, 1912	Tap
Riverton	Oct. 10, 1912	Tap
Rockaway	Dec. 2, 1911	Tap
Rockaway	Mch. 11, 1912	Tap
Rockaway	Mch. 25, 1912	West spring
Rockaway	Mch. 25, 1912	East spring
Rockaway	Jan. 8, 1912	Main stream from Mt. Hope pond
Rockaway	June 13, 1912	Tap
Rockaway	Sept. 25, 1912	Tap
Roebling	Dec. 4, 1911	Tap, filtered water
Roebling	Dec. 7, 1911	Raw water
Roebling	Dec. 7, 1911	Tap, filtered water
Roebling	Dec. 20, 1911	Tap
Roebling	Jan. 9, 1912	Tap, raw water
Roebling	Jan. 9, 1912	Tap, filtered water
Roebling	April 11, 1912	Raw water

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.	Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
0	1–e	0	....	....	.020	.086	.000	.12	4.0	86.0	....	...	In 10.0 cc.
0	1–e	50	....	....	.080	.176	.005	.04	4.5	86.0	....	...	In 0.1 cc.
0	1–e	0	....	....	.016	.188	.000	.16	4.5	76.0	....	...	In 10.0 cc.
10	1–e	*	126	65	.082	.180	.005	.32	4.5	59.0	....	0.4	In 0.1 cc.
0	1–e	0	99	63	.036	.086	.000	.28	4.5	58.0	....	0.2	In 1.0 cc.
0	1–e	20	110	61	.028	.088	.003	.20	4.5	50.0	....	0.3	In 10.0 cc.
0	0	0	93	45	.030	.068	.000	.20	4.5	43.0	....	0.0	In 0.1 cc.
0	0	0	175	149	.004	.014	.001	.00	3.5	95.0	....	0.0	Absent.
0	0	*	....	....	.006	.038	.001	.00	7.5	....	....	...	Absent.
15	0	*	....	....	.008	.012	.000	.00	6.5	88.0	....	...	Absent.
0	1–e	*	....	....	.026	.060	.005	.00	5.0	98.0	....	...	In 10.0 cc.
0	1–e	*	....	....	.014	.034	.000	.00	5.5	56.0	....	...	In 10.0 cc.
0	1–e	0	....	....	.036	.090	.002	.28	7.0	38.0	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	....	....	...	Absent.
15	0	*	....	....	.012	.046	.000	.28	7.0	46.0	....	...	Absent.
0	Dis.	40	....	....	.150	.096	.000	.00	6.5	.....	....	...	Absent.
0	0	0	90	56	.000	.020	.000	3.20	8.0	36.0	....	0.0	Absent.
0	0	0	116	86	.004	.010	.003	3.60	9.0	28.0	....	0.2	Absent.
0	0	0	....	....	.012	.046	.005	1.60	7.5	51.0	....	...	In 10.0 cc.
0	1–v	*	127	83	.038	.050	.003	1.40	7.5	55.0	....	0.2	In 1.0 cc.
0	1–v	0	....	....	.044	.110	.004	.80	....	.....	....	...	In 0.1 cc.
0	2–v	*	98	61	.064	.084	.001	1.20	7.5	86.0	....	0.0	In 10.0 cc.
0	0	0	108	74	.040	.090	.002	.80	6.5	86.0	....	0.0	In 1.0 cc.
0	0	0	119	77	.038	.084	.001	1.60	9.0	56.0	....	0.1	In 10.0 cc.
0	1–e	0	113	64	.014	.050	.000	1.20	7.0	62.0	....	0.0	Absent.
0	1–e	0	....	....	.006	.040	.000	.80	7.0	60.0	....	...	Absent.
0	1–e	0	56	36	.004	.016	.001	.60	2.5	18.0	....	0.0	Absent.
0	1–e	0	70	50	.004	.012	.000	.20	3.5	12.0	....	0.0	Absent.
0	1–e	0	57	42	.002	.006	.000	.00	2.5	12.0	....	0.3	Absent.
0	0	0	60	38	.014	.034	.000	1.60	2.5	23.0	....	0.0	In 10.0 cc.
0	0	0	....	....	.020	.020	.004	4.00	14.5	11.0	....	...	Absent.
0	0	0	....	....	.140	.034	.200	3.20	13.5	8.0	....	...	Absent.
0	1–e	0	122	70	.004	.006	.001	2.80	17.5	9.0	....	0.0	Absent.
0	0	0	150	84	.006	.012	.000	3.20	19.0	10.0	....	0.0	In 10.0 cc.
0	1–e	0	....	....	.006	.030	.002	4.80	33.0	6.0	....	...	Absent.
0	1–e	0	....	....	.008	.044	.001	6.40	17.5	9.0	....	...	Absent.
70	2–v	*	95	69	.018	.104	.000	.60	3.0	22.0	....	...	In 10.0 cc.
20	0	0	84	52	.018	.090	.002	.08	4.5	33.0	....	0.0	In 0.1 cc.
30	2–e	*	....	....	.114	.210	.002	.00	3.0	6.0	....	...	In 0.1 cc.
40	0	*	45	26	.020	.110	.008	.00	2.5	6.0	....	0.0	In 10.0 cc.
60	0	*	140	48	.072	170	.006	.80	4.0	22.0	....	0.4	In 0.1 cc.
30	2–v	*	120	76	.008	096	.000	.12	3.5	43.0	....	0.4	In 10.0 cc.
35	0	*	138	92	.064	146	.000	.28	6.0	58.0	....	0.3	In 10.0 cc.
0	1–e	*	....	....	.026	058	.005	.48	6.0	.....	....	...	In 0.1 cc.
...	.....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 5.0 cc.
0	2–e	*	76	56	.088	.132	.003	.12	5.0	25.0	....	0.5	In 0.1 cc.
0	1–e	0	54	36	.066	.076	.000	.00	5.5	18.0	....	0.3	In 10.0 cc.
50	2–e	25	90	55	.088	.090	.002	.28	7.0	3.0	....	0.2	In 0.1 cc.

* Slt. ‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Roebling	April 11, 1912	Tap, filtered water
Roebling	July 11, 1912	Tap, raw water
Roebling	July 11, 1912	Tap, filtered water
Roebling	Aug. 2, 1912	Tap, raw water
Roebling	Aug. 2, 1912	Tap, filtered water
Roebling	Aug. 28, 1912	Tap, filtered water
Roebling	Sept. 5, 1912	Raw water
Roebling	Sept. 5, 1912	Tap, raw water
Roebling	Sept. 5, 1912	Tap
Roebling	Sept. 5, 1912	Tap, filtered water
Roebling	Oct. 9, 1912	Raw water
Roebling	Oct. 9, 1912	Tap, filtered water
Rumson	Nov. 17, 1911	Tap, Tintern Manor Co.
Rumson	Dec. 28, 1911	Reservoir, Rumson Imp. Co.
Rumson	Feb. 15, 1912	Raw water, Rumson Imp. Co.
Rumson	Feb. 15, 1912	Reservoir, filtered, Rumson Imp. Co.
Rumson	May 10, 1912	Reservoir, raw water, Rumson Imp. Co.
Rumson	May 10, 1912	Tap, filtered water, Rumson Imp. Co.
Rumson	Aug. 9, 1912	Reservoir, raw water, Rumson Imp. Co.
Rumson	Aug. 9, 1912	Tap, filtered water, Rumson Imp. Co.
Rumson	Aug. 29, 1912	Raw water, Rumson Imp. Co.
Rumson	Aug. 29, 1912	Tap, filtered water, Rumson Imp. Co.
Rutherford	June 13, 1912	Tap
Rutherford	July 26, 1912	Tap
Rutherford	Aug. 9, 1912	Tap
Salem	Dec. 2, 1911	Tap
Salem	Mch. 13, 1912	Raw water from pond
Salem	Mch. 13, 1912	Tap
Salem	Mch. 16, 1912	Tap
Salem	June 22, 1912	Tap
Salem	June 27, 1912	Raw water
Salem	July 9, 1912	Pond
Salem	July 9, 1912	Reservoir
Salem	July 9, 1912	Tap
Salem	Sept. 7, 1912	Pond
Salem	Sept. 7, 1912	Tap, filtered water
Salem	Oct. 9, 1912	Pond
Salem	Oct. 9, 1912	Tap
Salem	Oct. 9, 1912	Tap
Salem	Oct. 28, 1912	Tap
Sea Girt	Jan. 17, 1912	Tap
Sea Girt	April 17, 1912	Tap
Sea Girt	July 29, 1912	Tap
Sea Isle City	Nov. 8, 1911	Tap
Sea Isle City	Feb. 5, 1912	Tap
Sea Isle City	Feb. 19, 1912	Tap
Sea Isle City	Feb. 19, 1912	Tap
Sea Isle City	May 22, 1912	Tap
Sea Isle City	June 7, 1912	Tap
Sea Isle City	June 7, 1912	Tap

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
0	2-e	0	53	32	.012	.084	.001	.24	5.0	5.0	....	0.0	In 10.0 cc.
0	1-e	50	....	....	.136	.120	.006	.16	7.0	45.0	....	...	In 0.1 cc.
0	0	0	....	....	.020	.060	001	.16	8.0	43.0	....	...	In 0.1 cc.
160	1-e	100	185	150	.042	.390	.002	.08	8.5	34.0	....	3.0	In 0.1 cc.
0	0	0	105	69	.010	.060	.000	.08	8.0	33.0	....	0.0	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
0	2-e	*	88	50	.090	.106	.005	.16	7.0	59.0	....	0.2	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
0	1-e	0	95	53	.026	.084	.000	.16	7.0	55.0	....	0.1	In 0.1 cc.
40	2-v	40	....	....	.050	.100	.002	.20	6.0	23.0	....	...	In 0.1 cc.
0	1-v	0	....	....	.040	.050	.001	.20	8.5	20.0	....	...	In 10.0 cc.
0	0	350	75	54	.080	.072	.012	.00	7.5	8.0	....	3.0	Absent.
0	1-e	0	....	....	.000	.030	.000	.00	4.5	.....	....	...	Absent.
0	0	*	....	....	.046	.066	.002	.00	5.0	.....	....	...	Absent.
0	0	0	....	....	.020	.060	.003	.00	5.5	.....	....	...	Absent.
15	0	*	....	....	014	.014	.000	.00	5.5	108.0	....	...	In 1.0 cc.
0	0	0	157	134	.004	.006	.000	.00	5.5	107.0	....	0.0	Absent.
0	1-e	25	....	....	.046	.066	.000	.00	5.0	174.0	....	...	In 1.0 cc.
0	1-e	0	....	....	.012	.042	.000	.00	5.0	179.0	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	1-e	0	....	....	.006	.042	.001	.00	5.0	28.0	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	2-e	25	322	312	.004	.038	.000	.00	6.0	14.0	....	...	In 10.0 cc.
0	0	170	....	....	.098	.250	.003	.08	6.5	.....	....	...	In 1.0 cc.
0	0	25	....	....	.200	.042	.007	.00	6.5	.....	....	...	In 10.0 cc.
0	1-e	0	....	....	.004	.032	.000	.08	8.0	124.0	....	...	Absent.
0	1-e	25	223	....	.016	.070	.004	.12	8.0	135.0	....	1.0	In 0.1 cc.
35	Dis.	*	32	26	.174	.200	.002	.00	5.0	5.0	....	0.7	In 1.0 cc.
50	2-e	0	62	32	.040	.180	000	.00	7.0	6.0	....	0.5	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
0	0	25	242	211	.360	.060	.003	.00	7.0	144.0	....	0.9	In 10.0 cc.
0	2-e	25	109	10	.178	.360	.006	.00	8.0	38.0	....	0.1	In 10.0 cc.
0	1-e	*	284	249	.058	.082	.000	.00	8.5	153.0	....	0.0	In 10.0 cc.
60	1-v	20	....	....	....	....	.000	.08	6.5	.....	....	...	In 1.0 cc.
0	0	*	....	....	....	....	.007	.08	6.5	.....	....	...	Absent.
0	0	*	....	....	....	....	.015	.08	6.5	.....	....	...	In 10.0 cc.
0	2-m	0	211	177	.022	.024	.004	.08	6.0	140.0	....	0.0	In 10.0 cc.
0	0	*	95	80	.030	.040	.002	.80	16.0	13.0	....	0.1	Absent.
0	0	0	122	105	.098	.034	.005	3.20	16.5	9.0	....	0.1	Absent.
0	2-e	0	106	86	.196	.126	.010	2.40	16.0	5.0	....	0.6	Absent.
0	0	0	156	128	.130	.050	.002	.00	16.5	79.0	....	0.0	Absent.
0	0	0	158	133	.120	.014	.003	.00	17.5	88.0	....	0.2	In 1.0 cc.
0	0	0	148	112	.080	.048	007	.00	17.0	83.0	....	0.0	In 1.0 cc.
0	0	0	170	128	.070	.032	.005	.00	17.0	81.0	....	0.0	In 1.0 cc.
0	0	0	135	125	.180	.040	.006	.00	17.5	84.0	....	0.1	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Sea Isle City	June 18, 1912	Well
Sea Isle City	June 18, 1912	Well
Sea Isle City	June 26, 1912	Tap
Sea Isle City	July 22, 1912	Tap
Sea Isle City	Aug. 19, 1912	Tap
Sea Isle City	Sept. 30, 1912	Well
Seaside Park	Jan. 16, 1912	Tap
Seaside Park	April 18, 1912	Tap
Seaside Park	July 30, 1912	Tap
Seaside Park	Oct. 17, 1912	Tap
Secaucus	July 12, 1912	Tap
Secaucus	Aug. 2, 1912	Tap
Sewell	Oct. 25, 1912	Tap
Short Hills	Jan. 4, 1912	Tap
Short Hills	April 5, 1912	Tap
Short Hills	July 22, 1912	Tap
Short Hills	Oct. 4, 1912	Tap
Smithville	Dec. 6, 1911	Tap
Smithville	Mch. 7, 1912	Tap, filtered water
Smithville	Mch. 7, 1912	Raw water
Smithville	June 17, 1912	Tap, raw water
Smithville	June 17, 1912	Tap, filtered water
Smithville	June 28, 1912	Well 110 ft.
Smithville	July 8, 1912	Tap, one well
Smithville	July 8, 1912	Tap, both wells
Smithville	July 8, 1912	Tap
Smithville	July 8, 1912	Tank, filtered water
Smithville	July 8, 1912	Well, filtered water
Smithville	July 14, 1912	Tap, raw water
Smithville	July 14, 1912	Tap, filtered water
Smithville	July 22, 1912	Tap
Smithville	Oct. 22, 1912	Tap, raw water
Smithville	Oct. 22, 1912	Tap, filtered water
South Amboy	Mch. 7, 1912	Tap
South Amboy	June 21, 1912	Tap
South River	Aug. 10, 1912	Tap
Sparta	Dec. 4, 1911	Tap, Andress' supply
Sparta	Mch. 5, 1912	Tap, Andress' supply
Sparta	April 9, 1912	Tap, D. Fisher's supply
Sparta	June 6, 1912	Tap, Andress' supply
Sparta	June 6, 1912	Tap, D. Fisher's supply
Sparta	June 6, 1912	Tap, R. M. Smith's supply
Sparta	Sept. 27, 1912	Tap, R. M. Smith's supply
Sparta	Sept. 27, 1912	Tap, D. Fisher's supply
Sparta	Sept. 27, 1912	Tap, Andress' supply
Spring Lake	Nov. 18, 1911	Overflow at reservoir
Spring Lake	Feb. 14, 1912	Tap
Spring Lake	Mch. 5, 1912	Tap
Spring Lake	April 16, 1912	Well No. 1
Spring Lake	April 16, 1912	Well No. 2

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS Free Ammonia.	NITROGEN AS Alb. Ammonia	NITROGEN AS Nitrites.	NITROGEN AS Nitrates.	Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	1–v	0	....	....	.230	.024	.004	.00	17.5	180.0	....	...	In 10.0 cc.
0	1–e	0	....	....	.230	.040	.001	.00	17.0	.....	....	...	Absent.
0	2–e	*	112	90	.082	.026	002	.00	5.0	.....	....	...	Absent.
0	1–e	*	143	121	.044	.018	.000	.08	2.5	.....	....	0.0	Absent.
0	1–e	*	....	....	.140	.062	.000	.00	5.5	69.0	....	...	Absent.
0	1–v	25	122	68	.118	.030	.001	.00	5.0	69.0	....	0.0	Absent.
0	0	0	92	71	.024	.080	.001	.12	8.5	44.0	....	0.3	In 10.0 cc.
...	....	.....	....	....	....	....	...	...	...	.....	....	.	In 20.0 cc.
0	1–v	20	126	102	.008	.018	.001	.00	3.5	66.0	....	0.5	Absent.
0	0	0	63	41	.006	.008	.000	.40	7.5	91.0	....	0.0	Absent.
0	0	0	160	139	.026	.022	.000	.48	8.0	89.0	....	0.0	Absent.
0	2–e	*	161	137	.004	.028	.001	.48	6.5	95.0	....	0.9	In 10.0 cc.
0	0	0	159	125	.024	.030	.001	.16	7.0	93.0	....	0.0	Absent.
0	0	*	107	91	.014	.030	.001	.00	3.5	.....	....	0.2	Absent.
0	0	*	124	106	.008	.014	.000	.00	3.5	49.0	....	0.6	Absent.
0	0	0	134	120	.052	.030	.000	.00	3.5	55.0	....	1.0	Absent.
0	2–e	*	113	91	.006	.024	.001	.00	2.5	48.0	....	4.0	Absent.
0	0	0	107	91	.018	.014	.020	.00	3.0	52.0	....	0.4	In 1.0 cc
0	0	0	119	93	.024	.040	.000	.00	3.5	56.0	....	0.1	In 1.0 cc
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	1–e	0	100	90	.008	.016	.002	.24	5.0	52.0	....	0.2	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
0	0	0	....	....	.016	.014	.000	.04	4.0	54.0	....	...	In 1.0 cc.
0	2–e	85	107	69	.104	.024	.000	.00	4.0	48.0	....	0.8	Absent.
0	0	0	105	66	.012	.018	.000	.00	4.0	58.0	....	0.0	Absent.
0	0	0	....	....	.016	.010	.001	.00	5.0	.....	....	...	Absent.
0	0	0	....	....	.022	.024	.004	.00	4.5	.....	....	...	Absent.
0	0	0	....	....	.028	.044	.000	.12	5.0	31.0	....	...	Absent.
0	0	0	181	169	.002	.010	.000	.08	2.5	.....	....	...	Absent.
0	0	0	176	134	.000	.006	.000	.08	3.0	151.0	....	0.0	Absent.
0	0	0	197	180	.000	.006	.000	.16	3.5	161.0	....	0.0	Absent.
0	0	0	184	150	.004	.012	.000	.00	3.0	155.0	....	0.4	In 10.0 cc.
0	0	0	185	155	.012	.014	.000	.00	3.0	151.0	....	0.0	Absent.
10	0	0	75	43	.004	.060	.001	.00	2.0	39.0	....	0.4	In 0.1 cc.
50	1–e	*	....	....	.048	.110	.000	.08	3.5	.....	....	...	In 0.1 cc.
0	0	*	....	....	.008	.040	.000	.12	3.5	.....	....	...	Absent.
0	0	0	....	....	.024	.064	.000	.12	3.5	.....	....	...	In 1.0 cc.
0	1–e	0	110	90	.084	.044	.010	.00	2.0	74.0	....	0.2	In 10.0 cc.
0	0	0	105	80	.048	.018	.003	.00	2.0	74.0	....	0.3	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.2 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Spring Lake	April 16, 1912	Well No. 3
Spring Lake	April 16, 1912	Well No. 4
Spring Lake	April 16, 1912	Well No. 5
Spring Lake	April 16, 1912	Well No. 6
Spring Lake	April 16, 1912	Well No. 7
Spring Lake	April 16, 1912	Tap, wells
Spring Lake	May 9, 1912	Tap
Spring Lake	May 27, 1912	Well No. 1
Spring Lake	May 27, 1912	Well No. 2
Spring Lake	May 27, 1912	Well No. 3
Spring Lake	May 27, 1912	Well No. 4
Spring Lake	May 27, 1912	Well No. 5
Spring Lake	May 27, 1912	Well No. 6
Spring Lake	May 27, 1912	Well No. 7
Spring Lake	May 27, 1912	Tap
Spring Lake	Aug. 8, 1912	Tap
Stirling	Dec. 7, 1911	Tap
Stirling	Mch. 8, 1912	Tap
Stirling	June 4, 1912	Tap
Stirling	Sept. 30, 1912	Tap
Stockton	Mch. 19, 1912	Tap
Stockton	June 12, 1912	Tap
Stockton	Sept. 18, 1912	Tap
Stone Harbor	Nov. 9, 1911	Tap
Stone Harbor	Feb. 5, 1912	Tap
Stone Harbor	May 23, 1912	Tap
Stone Harbor	Aug. 5, 1912	Tap
Summit	Jan. 4, 1912	Tap, Canoe brook supply
Summit	Jan. 4, 1912	Tap, Green brook supply
Summit	Mch. 14, 1912	Wells, Canoe brook supply
Summit	Mch. 14, 1912	Wells, Canoe brook supply
Summit	April 5, 1912	Tap, Canoe brook supply
Summit	April 5, 1912	Tap, Green brook supply
Summit	April 11, 1912	Tap
Summit	May 20, 1912	Reservoir
Summit	May 20, 1912	Tap
Summit	June 3, 1912	Tap
Summit	June 5, 1912	Tap
Summit	June 5, 1912	Tap
Summit	June 5, 1912	Tap
Summit	June 12, 1912	Tap
Summit	June 17, 1912	Tap
Summit	June 17, 1912	Tap
Summit	June 17, 1912	Tap
Summit	June 19, 1912	Main well
Summit	June 19, 1912	Old reservoir
Summit	July 9, 1912	Spring
Summit	July 9, 1912	Tap, lower well
Summit	July 22, 1912	Tap, Canoe brook supply
Summit	July 22, 1912	Tap, Green brook supply

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	0	0	107	97	.016	.010	.091	.00	3.0	54.0	....	0.1	In 10.0 cc.
...	....	500	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
0	0	*	111	89	.014	.050	.012	.00	2.5	114.0	....	0.0	Absent.
0	0	*	253	242	.014	.008	.000	.24	6.0	186.0	....	0.0	Absent.
0	0	0	270	236	.006	.010	.000	.00	7.5	188.0	....	0.4	Absent.
0	0	0	262	222	.000	.012	.000	.16	6.5	188.0	....	0.0	Absent.
0	1-v	0	244	164	.014	.042	.000	.16	5.5	184.0	....	0.5	In 10.0 cc.
0	0	0	70	52	.006	.014	.003	2.80	4.0	28.0	....	0.0	Absent.
0	0	0	....	....	.008	.012	.001	.00	2.0	21.0	....	...	In 1.0 cc.
0	0	0	93	77	.016	.052	.000	1.52	3.0	51.0	....	0.0	In 1.0 cc.
10	0	*	....	....	.074	.038	.010	.00	16.5	98.0	....	...	Absent.
0	1-e	0	200	156	.290	....	.003	.00	16.5	98.0	....	0.1	Absent.
0	2-e	0	210	166	.190	.040	.003	.00	16.5	94.0	....	0.0	Absent.
0	1-e	0	....	....	.026	.048	.000	.08	16.0	148.0	....	...	Absent.
0	1-e	0	110	80	.006	.016	.000	.00	3.5	32.0	....	...	Absent.
0	1-e	0	92	72	.008	.016	.000	.00	3.5	36.0	....	...	Absent.
0	0	0	....	....	.000	.000	.000	.00	6.0	90.0	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	1-e	0	108	78	.010	.010	.000	.00	4.0	31.0	....	0.0	Absent.
0	2-e	0	108	88	.006	.020	.000	.04	4.5	3.0	....	0.1	In 1.0 cc.
0	0	0	....	....	.004	.018	.000	.00	4.5	.....	....	...	Absent.
0	0	0	....	....	.006	.034	.002	.08	3.5	.....	....	...	Absent
10	0	0	....	....	.004	.024	.000	.12	4.5	.....	....	...	In 10.0 cc.
0	3-e	0	....	....	.004	.020	.000	.12	4.5	.....	....	...	In 10.0 cc.
5	0	*	....	....	.002	.008	.000	.04	5.5	.....	....	...	Absent.
5	0	*	....	....	.004	.016	.000	.012	3.5	.....	....	...	Absent.
0	0	0	....	....	.004	.012	.000	.04	3.5	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
0	2-e	0	....	....	.016	.040	.000	.08	4.0	35.0	....	...	In 10.0 cc.
0	2-e	0	....	....	.016	.070	.000	.04	4.0	35.0	....	...	In 10.0 cc.
0	2-e	0	....	....	.020	.046	.000	.08	4.0	25.0	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
0	1-e	0	....	....	.004	.028	.000	.12	5.0	92.0	....	...	Absent.
0	2-e	0	....	....	.012	.038	.000	.08	4.0	40.0	....	...	In 10.0 cc.

† Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Summit	Aug. 6, 1912	Well No. 3
Summit	Aug. 6, 1912	Suction well
Summit	Aug. 26, 1912	Well No. 1
Summit	Aug. 26, 1912	Well No. 5
Summit	Sept. 9, 1912	Well No. 4
Summit	Sept. 11, 1912	Tap, Canoe brook supply
Summit	Sept. 11, 1912	Tap, Canoe brook supply
Summit	Sept. 11, 1912	Tap, Canoe brook supply
Summit	Oct. 4, 1912	Tap, Canoe brook supply
Summit	Oct. 4, 1912	Tap, Green brook supply
Summit	Oct. 15, 1912	Suction well No. 1
Summit	Oct. 15, 1912	Driven well No. 7
Summit	Oct. 15, 1912	Rock well No. 7
Summit	Oct. 21, 1912	Well, Canoe brook supply
Surf City	April 15, 1912	Tap
Surf City	July 29, 1912	Tap
Surf City	Oct. 18, 1912	Tap
Sussex	Dec. 9, 1911	Tap
Sussex	Mch. 7, 1912	Tap
Sussex	June 7, 1912	Tap
Sussex	July 7, 1912	At intake
Sussex	July 7, 1912	Stream
Sussex	July 7, 1912	Lake
Sussex	Sept. 27, 1912	Tap
Swedesboro	Dec. 1, 1911	Tap
Swedesboro	Mch. 15, 1912	Tap
Swedesboro	June 21, 1912	Tap
Swedesboro	Sept. 6, 1912	Tap
Tenafly	Oct. 25, 1912	Tap
Toms River	Jan. 16, 1912	Tap
Toms River	Mch. 26, 1912	Tap
Toms River	April 16, 1912	Tap
Toms River	July 30, 1912	Tap
Toms River	Oct. 17, 1912	Tap
Trenton	Nov. 23, 1911	Tap
Trenton	Dec. 5, 1911	River
Trenton	Dec. 14, 1911	Tap
Trenton	Feb. 20, 1912	Tap
Trenton	Feb. 21, 1912	Tap
Trenton	Feb. 23, 1912	Tap
Trenton	Feb. 23, 1912	Tap
Trenton	Feb. 24, 1912	Tap
Trenton	Mch. 29, 1912	Tap
Trenton	June 17, 1912	Tap
Trenton	June 28, 1912	Tap
Trenton	July 11, 1912	Tap
Trenton	Oct. 28, 1912	Tap
Tuckerton	Jan. 15, 1912	Tap
Tuckerton	April 16, 1912	Tap
Tuckerton	July 30, 1912	Tap

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
0	1-e	*	92	64	.034	.106	.000	.00	4.0	54.0	.....	0.0	In 0.1 cc.
0	0	0	99	74	.016	.104	.000	.08	4.0	71.0	.....	0.0	In 10.0 cc.
...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	In 10.0 cc.
...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	Absent.
...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	In 10.0 cc.
0	0	0	.....	.....	.026	.048	.000	.20	6.5	.....	.....	...	In 10.0 cc.
0	0	0	.....	.....	.028	.046	.003	.08	7.5	.....	.....	...	In 10.0 cc.
0	0	0	.....	.....	.050	.070	.000	.08	29.0	.....	.....	...	Absent.
0	0	0	217	173	.030	.048	.000	.00	5.5	82.0	.....	0.1	In 1.0 cc.
0	0	0	103	65	.022	.030	.000	.00	4.5	.....	.....	0.2	In 1.0 cc.
...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	In 10.0 cc.
...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	Absent.
...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	Absent.
...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	Absent.
0	3-e	0	88	74	.014	.020	000	.00	9.0	32.0	....	0.0	Absent.
0	0	0	.....	.....	.016	.068	.000	.00	7.0	26.0	.....	...	Absent.
0	1-e	0	.....	.....	.016	.026	.001	.04	5.0	15.0	.....	...	Absent.
0	0	0	48	31	.054	.078	.002	.08	2.5	90.0	.....	0.2	Absent.
0	0	0	20	12	.006	.028	.000	.00	1.5	6.0	....	0.0	Absent.
0	0	*	70	51	.006	.036	.000	.00	1.5	8.0	....	...	In 1.0 cc.
0	0	0	.....	.....	.120	.120	.000	.00	3.5	.....	.....	...	In 1.0 cc.
0	1-e	*	.....	.....	.130	.110	.002	.00	2.5	.....	.....	...	In 10.0 cc.
0	1-e	0	.....	.....	.016	.096	001	.00	2.5	.....	.....	...	In 1.0 cc.
0	1-e	*	.....	.....	.044	.120	.000	.04	2.5	.....	.....	...	In 1.0 cc.
0	0	25	132	118	.020	.026	.001	.00	11.0	79.0	....	...	In 10.0 cc.
0	1-e	*	95	80	.070	.018	.000	.00	10.0	73.0	....	0.7	Absent.
20	0	25	.....	.....	.210	.030	002	.00	12.0	73.0	....	...	Absent.
0	0	*	136	93	Ppt.	.018	001	.00	11.0	89.0	....	0.2	Absent.
0	1-v	50	.....	.....	.020	.116	.000	0.8	8.0	.....	....	...	Absent.
25	1-e	*	47	24	.028	.014	.003	.00	7.0	.....	....	...	Absent.
...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	Absent.
10	1-e	*	41	28	.010	.018	002	.00	7.0	0.0	....	0.2	Absent.
0	0	0	62	27	.002	.042	.000	0.8	6.5	0.0	.....	0.6	Absent.
0	1-e	*	.....	.....	.012	.020	.001	.08	7.5	‡	.....	...	In 1.0 cc
25	0	80	53	37	....	....	.004	.08	3.5	21.0	....	0.3	In 0.1 cc.
0	1-e	20	.....	.....	.020	.070	005	.12	3.0	21.0	....	...	In 5.0 cc.
0	0	*	58	53	.014	.060	003	.20	3.0	24.0	.....	0.3	Absent.
0	2-e	*	220	.....	.080	.082	.002	.44	5.0	38.0	37.0	...	In 10.0 cc.
0	1-e	*	93	44	.064	.096	.001	.24	5.0	.....	.....	0.3	In 15.0 cc.
20	1-e	175	178	132	.088	.180	.002	.20	5.0	38.0	....	7.0	In 5.0 cc.
20	1-e	250	192	132	.104	.190	.001	.28	5.0	30.0	.....	3.0	In 2.0 cc.
35	1-e	270	242	187	.110	.230	.001	.20	5.0	29.0	.....	3.0	In 4.0 cc.
0	1-e	25	68	40	.046	.094	.002	.28	3.5	15.0	38.8	0.2	In 10.0 cc.
0	1-e	*	.....	.....	.070	.070	.004	.16	4.5	32.0	.....	.....	Absent.
0	2-e	*	98	62	.046	100	.002	.20	4.5	38.0	....	0.5	In 0.1 cc.
0	1-e	0	.....	.....	.050	.080	004	.24	5.0	49.0	.....	.....	In 0.1 cc.
0	1-e	25	101	51	.030	124	000	.12	5.5	28.0	.....	0.9	In 10.0 cc.
100	1-v	*	.....	.....	.026	.010	.000	.00	7.5	.4	.....	.....	In 10.0 cc.
90	3-v	0	32	16	.012	.060	002	.08	8.0	‡	.....	0.1	In 1.0 cc.
140	2-e	0	46	7	.042	.164	.000	.08	6.0	0.0	....	0.2	In 1.0 cc.

‡ Acid.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Tuckerton	Oct. 18, 1912	Tap
Ventnor	Jan. 3, 1912	Tap
Ventnor	April 6, 1912	Tap
Ventnor	July 5, 1912	Tap
Ventnor	Aug. 7, 1912	Well No. 3
Ventnor	Aug. 7, 1912	Tap
Ventnor	Oct. 24, 1912	Tap
Verona	May 28, 1912	Tap
Verona	June 5, 1912	Tap
Verona	Oct. 10, 1912	West end
Verona	Oct. 10, 1912	East end
Verona	Oct. 10, 1912	Center
Vincentown	Dec. 6, 1911	Tap
Vincentown	Mch. 19, 1912	Tap
Vincentown	Mch. 19, 1912	Tap
Vincentown	June 17, 1912	Tap
Vincentown	Sept. 9, 1912	Tap
Vineland	Jan. 3, 1912	Tap
Vineland	Jan. 15, 1912	Tap
Vineland	April 15, 1912	Tap
Vineland	July 1, 1912	Tap
Vineland	Oct. 21, 1912	Tap
Wallington	Jan. 3, 1912	Tap
Wallington	April 1, 1912	Tap
Wallington	July 20, 1912	Tap
Wallington	Oct. 21, 1912	Tap
Warren Paper Mills	Dec. 14, 1911	Stream
Warren Paper Mills	Dec. 14, 1911	Tap, filtered water
Warren Paper Mills	Mch. 25, 1912	Tap, water from springs
Warren Paper Mills	Mch. 25, 1912	Tap, filtered water
Washington	Nov. 11, 1911	Tap
Washington	Feb. 2, 1912	Tap
Washington	May 3, 1912	Tap
Washington	Aug. 28, 1912	Tap
Wenonah	Dec. 5, 1911	Tap
Wenonah	Mch. 19, 1912	Tap
Wenonah	June 25, 1912	Tap
Wenonah	June 28, 1912	Tap
Wenonah	Sept. 3, 1912	Tap
Wenonah	Sept. 16, 1912	Tap
Westfield	Nov. 1, 1911	Tap
Westfield	July 2, 1912	Tap
Westfield	Aug. 2, 1912	Tap
Westfield	Sept. 27, 1912	Tap
West Grove	Aug. 8, 1912	Raw water
West Grove	Aug. 8, 1912	Tap, filtered water
West Grove	Sept. 17, 1912	Raw water
West Grove	Sept. 17, 1912	Tap, filtered water
Westville	Dec. 5, 1911	Tap
Westville	Mch. 15, 1912	Tap

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
10	1-e	* 0	....	....	.020	.094	.000	.04	7.5	12.0	....	...	In 1.0 cc.
0	0	* 0	116	82	.006	.014	.000	.00	6.5	54.0	....	0.1	Absent.
0	0	0	115	90	.070	.036	005	.00	8.0	52.0	....	0.0	Absent.
0	0	0	229	191	.074	.060	.013	.04	57.0	53.0	....	0.0	Absent.
0	0	0	124	91	.164	.082	.000	.00	6.0	82.0	....	0.0	Absent.
0	0	0	123	57	.112	.042	.007	.00	8.5	84.0	....	0.0	Absent.
0	0	*	....	....	.004	.018	.000	.04	11.5	55.0	....	...	Absent.
0	0	0	....	....	.016	.024	.001	.20	6.0	.....	....	...	In 10.0 cc.
0	0	0	....	....	.016	.076	.001	.08	6.5	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
100	2-v	*	40	19	.026	.154	.000	.08	3.0	.....	....	0.5	In 10.0 cc.
100	2-v	0	....	....	.020	.110	.000	.04	3.0	‡	....	...	In 10.0 cc.
80	3-v	*	43	11	.018	.100	.000	.00	3.0	‡	....	1.2	In 10.0 cc.
200	1-v	*	42	8	.054	.084	.000	.12	3.0	‡	....	1.5	In 10.0 cc.
90	1-e	0	48	9	.044	.118	.000	.08	6.5	5.0	....	0.0	In 1.0 cc.
0	1-e	0	92	38	.100	.028	.014	1.00	5.0	6.0	....	...	Absent.
0	0	0	67	20	.074	.048	.000	2.00	6.5	1.0	....	0.1	Absent.
0	0	0	57	27	.100	.064	.003	4.80	7.0	5.0	....	0.0	Absent.
0	0	0	49	30	.160	.048	.007	2.40	8.5	3.0	....	0.0	Absent.
0	1-e	0	....	....	.240	.016	.060	1.60	7.0	5.0	....	...	Absent.
0	0	0	217	170	.002	.016	.000	3.60	10.0	69.0	....	0.0	Absent.
0	1-e	*	231	186	.006	.008	.002	8.00	11.5	66.0	....	0.2	Absent.
0	0	0	244	166	.012	.040	.001	9.20	10.0	66.0	....	0.1	In 1.0 cc.
0	1-e	0	....	....	.012	.022	.000	5.60	10.5	69.0	....	...	In 10.0 cc.
0	2-e	*	....	....	.010	.038	.001	.08	3.5	52.0	....	...	In 1.0 cc.
0	2-e	0	....	....	.014	.074	.001	.12	3.5	53.0	....	...	In 1.0 cc.
0	3-v	0	....	....	.018	.018	.000	.04	3.5	12.0	....	...	Absent.
0	2-v	50	....	....	.046	.150	.000	.60	3.0	24.0	....	...	In 0.1 cc.
10	0	*	57	34	.016	.040	.001	.60	3.0	16.0	....	0.2	In 1.0 cc.
0	....	0	55	35	.008	.050	.000	.00	2.5	5.0	....	0.0	Absent.
0	0	*	105	91	.018	.050	.000	.20	3.0	15.0	....	1.5	In 1.0 cc.
0	1-v	*	80	35	.036	.090	.001	.20	2.5	30.0	....	0.0	In 1.0 cc.
0	0	*	192	179	.012	.014	.002	.08	8.5	117.0	....	0.3	Absent.
0	0	0	192	132	.040	.026	.003	.08	9.0	123.0	....	0.6	Absent.
0	1-e	0	207	139	.264	.036	.004	.09	10.0	121.0	....	0.4	Absent.
0	0	0	....	127	.250	.070	.000	.00	9.0	121.0	....	0.1	Absent.
0	1-e	0	....	....	.220	.044	.005	.09	9.0	179.0	....	...	In 1.0 cc.
0	1-e	*	....	....	.054	.018	.001	.16	9.5	.....	....	...	Absent.
0	0	30	....	....	.016	.034	.001	1.00	3.0	.....	....	...	Absent.
0	1-e	0	219	168	.030	.016	.003	1.20	7.5	106.0	....	0.1	In 10.0 cc.
0	0	0	....	....	.016	.064	.000	.48	6.0	167.0	....	...	Absent.
0	1-e	0	....	....	.012	.048	000	.60	6.5	107.0	....	...	Absent.
20	2-e	50	....	....	.122	.036	.001	.00	4.5	55.0	....	...	Absent.
0	0	0	....	....	.030	.028	.000	.04	5.5	55.0	....	...	Absent.
20	0	90	98	66	.104	.060	.001	.00	5.0	41.0	....	0.0	In 10.0 cc.
0	0	0	80	53	.026	.042	.000	.00	5.0	43.0	....	0.0	Absent.
0	0	0	171	154	.130	.044	.003	.08	3.0	70.0	....	0.3	Absent.
0	1-e	*	110	95	.100	.036	.002	....	3.5	66.0	....	0.7	Absent.

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RECORD OF ANALYSES OF PUBLIC

Results of Chemical Analyses

TOWN.	DATE.	SOURCE OF SAMPLE.
Westville	June 18, 1912	Tap
Westville	Sept. 3, 1912	Tap
Westwood	June 10, 1912	Tap
Wharton	Nov. 8, 1911	Tap
Wharton	Feb. 1, 1912	Tap
Wharton	May 2, 1912	Tap
Wharton	Sept. 29, 1912	Tap
White Horse	Jan. 3, 1912	Tap
White Horse	May 6, 1912	Tap
White Horse	Sept. 30, 1912	Tap
Wildwood	Nov. 9, 1911	Tap
Wildwood	Nov. 15, 1911	Tap
Wildwood	Feb. 6, 1912	Tap
Wildwood	May 22, 1912	Tap
Wildwood	Aug. 6, 1912	Tap
Williamstown	Nov. 6, 1911	Tap, Tice Co.
Williamstown	Nov. 6, 1911	Tap, Monroe Co.
Williamstown	Feb. 18, 1912	Tap, Tice Co.
Williamstown	Feb. 19, 1912	Tap, Monroe Co.
Williamstown	May 20, 1912	Tap, Tice Co.
Williamstown	May 20, 1912	Tap, Monroe Co.
Williamstown	Aug. 8, 1912	Tap, Tice Co.
Williamstown	Aug. 8, 1912	Tap, Monroe Co.
Woodbine	Nov. 9, 1911	Tap
Woodbine	Feb. 7, 1912	Tap
Woodbine	May 23, 1912	Tap
Woodbine	July 11, 1912	Tap
Woodbine	Aug. 6, 1912	Tap
Woodbridge	May 24, 1912	Tap
Woodbridge	May 24, 1912	Tap
Woodbury	Dec. 1, 1911	Tap
Woodbury	Mch. 21, 1912	Tap
Woodbury	April 27, 1912	Tap
Woodbury	April 27, 1912	Raw water
Woodbury	June 21, 1912	Tap
Woodbury	July 8, 1912	Tap
Woodbury	July 8, 1912	Tap
Woodbury	July 17, 1912	Raw water
Woodbury	July 17, 1912	Reservoir, treated water
Woodbury	July 17, 1912	Tap
Woodbury	July 26, 1912	Tap, entering reservoir
Woodbury	July 26, 1912	Tap, leaving reservoir
Woodbury	Aug. 7, 1912	Tap
Woodbury	Sept. 6, 1912	Tap
Woodbury	Sept. 17, 1912	Tap
Woodbury	Sept. 17, 1912	Tap
Woodstown	Dec. 1, 1911	Tap
Woodstown	Mch. 15, 1912	Tap
Woodstown	June 21, 1912	Tap
Woodstown	Sept. 6, 1912	Tap
Wrightstown	Dec. 15, 1911	Tap
Wrightstown	Mch. 26, 1912	Tap
Wrightstown	June 18, 1912	Tap
Wrightstown	Sept. 23, 1912	Tap

† Iron ppt.

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WATER SUPPLIES OF NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated).
					Free Ammonia.	Alb. Ammonia	Nitrites.	Nitrates.					
0	1-e	*	112	90	.078	.066	.002	.12	3.5	68.0	....	0.8	Absent.
0	0	*	....	....	.060	.086	.001	.08	2.5	108.0	....	...	Absent.
0	1-e	0	....	....	.010	.040	.002	.08	5.0	28.0	....	...	Absent.
0	0	0	....	....	.020	.054	.001	.40	3.0	1.0	....	...	In 10.0 cc.
0	....	0	60	40	.006	.008	.000	.04	3.5	25.0.	....	0.2	Absent.
0	0	0	64	30	.000	.006	.000	.20	4.0	16.0	....	0.0	Absent.
0	1-e	0	....	....	.018	.032	.000	.40	5.5	33.0	....	...	In 10.0 cc.
0	0	0	38	21	.012	.018	.002	2.80	4.0	8.0	....	0.2	Absent.
0	1-e	0	45	20	.022	.020	.001	.68	3.5	6.0	....	0.0	Absent.
0	0	0	61	31	.230	.026	.000	.40	4.5	18.0	....	0.2	Absent.
0	0	*	....	....	.016	.040	.006	.00	25.0	75.0	....	...	In 0.1 cc.
25	1-v	30	96	67	.058	.054	.000	.00	13.0	....	....	1.0	In 10.0 cc.
0	0	*	109	93	054	.038	.002	.00	13.0	52.0	....	...	Absent.
0	0	0	113	93	.012	.028	.002	.08	12.0	58.0	....	0.4	Absent.
0	1-e	*	....	....	Ppt.	.052	.070	.00	33.0	145.0	....	...	Absent.
0	0	0	66	38	.020	.042	.004	3.20	7.5	0.0	....	0.2	Absent.
0	0	0	47	35	.110	.048	.025	1.00	2.5	18.0	....	0.5	Absent.
0	1-e	0	48	26	.042	.034	.006	1.00	8.0	3.0	....	0.4	Absent.
0	0	*	66	44	.044	.020	.004	.64	3.0	8.0	....	2.4	Absent.
0	0	*	51	38	.060	.028	.005	1.28	6.5	11.0	....	0.0	Absent.
0	0	25	66	38	.074	.024	.007	.68	3.0	12.0	....	0.4	Absent.
0	0	0	....	....	.274	.042	.010	1.40	6.5	17.0	....	...	Absent.
0	0	0	....	....	.220	.074	.000	.80	3.0	34.0	....	...	Absent.
0	0	0	....	....	.042	.038	.004	1.68	12.5	0.0	....	...	Absent.
0	1-e	0	....	....	....	....	002	.40	11.0	‡	....	...	Absent.
0	0	*	80	46	.096	.024	.000	2.00	13.0	1.0	....	1.0	Absent.
0	Bich	0	90	36	.102	.052	004	1.08	13.5	1.0	....	0.6	In 10.0 cc.
0	1-e	*	....	....	.266	.036	.001	1.00	13.0	‡	....	...	Absent.
0	0	0	....	....	.016	.022	.001	.48	8.5	98.0	....	...	Absent.
0	0	0	....	....	.004	.026	.000	.60	8.5	113.0	....	...	Absent.
50	1-v	30	57	46	.026	.078	.003	.40	4.5	21.0	....	0.5	In 10.0 cc.
25	3-v	35	80	30	.054	.114	.017	.40	4.5	4.0	....	...	In 1.0 cc.
15	2-e	*	....	....	.030	.068	.003	.40	5.0	6.0	....	...	In 10.0 cc
15	2-e	*	....	....	.032	.072	.008	.40	5.0	8.0	....	...	In 1.0 cc.
60	1-v	25	....	....	.046	.130	.002	.00	5.0	18.0	....	...	In 0.1 cc.
50	0	0	71	46	.026	.078	.002	.20	5.0	17.0	....	0.7	In 0.1 cc.
50	0	0	67	55	.038	.084	.002	.20	4.5	10.0	....	0.3	In 0.1 cc.
60	1-e	45	136	96	.158	.130	.004	.08	5.0	14.0	....	.33	In 0.1 cc.
45	1-e	*	86	28	.162	.092	.001	.08	5.0	17.0	....	0.2	In 1.0 cc.
55	1-e	*	86	78	.092	.080	.001	.08	9.0	.....	....	.12	In 1.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 20.0 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 5.0 cc.
25	2-e	*	....	....	.068	.148	.001	.20	5.5	.....	....	...	In 10.0 cc.
0	1-v	*	65	28	.018	.066	.001	.00	6.0	25.0	....	1.2	In 0.1 cc.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
...	....	.....	....	....	....	....	....	....	....	.....	....	...	In 1.0 cc.
0	0	30	248	228	.070	.020	002	.00	4.0	175.0	....	0.8	Absent.
0	0	*	245	223	.020	.018	.000	....	4.5	165.0	....	0.6	Absent.
0	1-e	0	....	....	.038	.038	.003	.00	5.5	.....	....	...	Absent.
0	0	0	254	214	.008	.018	.000	.00	5.0	196.0	....	0.7	Absent.
0	2-e	*	....	....	.018	.034	.005	4.00	9.5	8.0	....	...	In 10.0 cc
0	1-e	0	132	90	.026	.034	.008	3.60	13.5	6.0	....	0.3	In 10.0 cc.
0	0	*	134	92	.040	.044	.012	.00	15.5	7.0	....	0.4	Absent.
120	2-e	75	137	67	Ppt.	.084	240	2.40	14.5	20.0	....	1.4	Absent.

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RECORD OF ANALYSES OF WATER FROM THE SUPPLIES OF STATE INSTITUTIONS.

Results of Chemical Analyses Expressed in parts per million.

DATE.	SOURCE OF SAMPLE.	Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Iron.	B. Coli (indicated.)
							Free Ammonia.	Alb. Ammonia.	Nitrites.	Nitrates.				
NEW JERSEY SANATORIUM FOR TUBERCULOUS DISEASES, GLEN GARDNER.														
5-22-12	Rocky Run Brook	0	1-e	Slt.	56	43	.024	.048	.001	.40	2.0	16.	0.2	In 0.1 cc.
5-22-12	Rocky Run Brook	0	1-e	Slt.	.....	.....	.020	.043	.002	.48	2.0	17.	.....	In 0.1 cc.
5-22-12	Rocky Run Brook	0	1-e	Slt.	.....	.....	.022	.038	.002	.40	2.0	14.	.....	In 0.1 cc.
7- 9-12	Tap	0	0	Slt.	.....	.....	.010	.056	.005	.40	4.0	.....	.....	In 1.0 cc.
7-10-12	Rocky Run Brook	0	0	Slt.	.....	.....	.032	.068	.002	.32	3.5	.....	.....	In 1.0 cc.
7-10-12	Rocky Run Brook	0	0	0	.....	.....	.028	.090	.002	.36	3.5	.....	.....	In 0.1 cc.
8- 1-12	Rocky Run Brook	0	Disag.	0	.....	.....	.054	.106	.000	.12	2.5	.....	.....	In 0.1 cc.
8- 1-12	Rocky Run Brook	0	Disag.	0	.....	.....	.050	.114	.000	.00	2.5	.....	.....	In 0.1 cc.
8-13-12	Rocky Run Brook	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	In 0.1 cc.
8-13-12	Rocky Run Brook	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	In 0.1 cc.
8-13-12	Rocky Run Brook	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	In 0.1 cc.
8-13-12	Tap—Raw Water	0	1-e	0	47	27	.016	.094	.003	.24	4.0	38.	0.0	In 0.1 cc.
8-13-12	Tap—Filtered Water	0	1-e	Slt.	73	11	.018	.094	.001	.28	4.0	32.	0.3	In 0.1 cc.
9-26-12	Tap	0	1-e	Slt.	45	26	.026	.068	.000	.80	3.5	20.	0.0	In 10.0 cc.
NEW JERSEY STATE HOME FOR BOYS, JAMESBURG.														
1-17-12	Tap	0	0	Slt.	43	30	.036	.042	.000	.02*	5.0	8.	0.2	In 0.1 cc.
1-23-12	Stream	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	In 0.1 cc.
1-23-12	Tap	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	In 0.1 cc.
1-31-12	Stream	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Absent.
1-31-12	Stream	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Absent.
1-31-12	Stream	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Absent.
1-31-12	Stream	0	.....	Slt.	.....	.....	.018	.112	.000	.04	5.0	.....	.....	In 10.0 cc.
1-31-12	Tap	0	.....	Slt.	.....	.....	.014	.040	.000	.04	5.0	.....	.....	Absent.
1-31-12	Reservoir	0	.....	0	.....	.....	.300	.088	.004	1.4	9.5	.....	.....	Absent.
8-15-12	Tap	40	2-e	100	70	42	.034	.128	.000	.56	5.5	8.	1.0	In 0.1 cc.
8-22-12	Reservoir	0	0	100	73	37	.112	.378	.001	.32	6.5	6.	0.1	In 0.1 cc.
8-22-12	Spring—Receiving Well	0	0	100	80	39	.134	.170	.002	2.56	8.0	†	0.1	In 0.1 cc.
8-22-12	Tap	0	0	100	70	41	.054	.158	.001	.76	5.5	†	0.1	In 0.1 cc.
10-11-12	Tap	0	2-e	Slt.	.....	.....	.012	.108	0	.72	4.5	11.	.....	In 0.1 cc.
NEW JERSEY HOME FOR DISABLED SOLDIERS, KEARNY.														
6-10-12	Reservoir	0	1-e	0	.....	.....	.004	.016	.002	.04	10.5	.....	.....	In 1.0 cc.
6-25-12	Tap	0	3-e	0	.....	.....	.010	.036	.003	4.0	11.5	91.	.....	Absent.
9-16-12	Driven Well, 612 ft.	0	0	0	214	116	.020	.040	.000	2.8	11.5	107.	0	Absent.

* Iron ppt.
† Acid.

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RECORD OF ANALYSES OF WATER FROM THE SUPPLIES OF STATE INSTITUTIONS.

Results of Chemical Analyses Expressed in parts per million.

DATE.	SOURCE OF SAMPLE.	Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Iron.	B. Coli (Indicated.)
							Free Ammonia.	Alb. Ammonia.	Nitrites.	Nitrates.				
NEW JERSEY STATE HOSPITAL, MORR IS PLAINS.														
2- 3-12	Tap	0	1-e	0	40	14	.012	.022	.000	.00	3.0	8.	0	In 10.0 cc.
4-17-12	Intake Reservoir	...	...	...	...	...	...	...	...	...	...	...	...	In 10.0 cc.
4-17-12	Collecting Drain	...	...	...	...	...	...	...	...	...	...	...	...	In 10.0 cc.
4-17-12	Collecting Drain	...	...	...	...	...	...	...	...	...	...	...	...	In 10.0 cc.
4-17-12	Spring Collecting Reservoir	...	...	...	...	...	...	...	...	...	...	...	...	In 10.0 cc.
4-17-12	Upper Garden Reservoir	...	...	...	...	...	...	...	...	...	...	...	...	In 10.0 cc.
4-17-12	Spring	...	...	...	...	...	...	...	...	...	...	...	...	Absent.
4-17-12	Klondyke Reservoir	...	...	...	...	...	...	...	...	...	...	...	...	In 10.0 cc.
7- 1-12	Collecting Spring Basin	...	...	...	...	...	...	...	...	...	...	...	...	In 0.1 cc.
7- 1-12	Garden Reservoir	...	...	...	...	...	...	...	...	...	...	...	...	In 1.0 cc.
7- 1-12	Spring	...	...	...	...	...	...	...	...	...	...	...	...	In 10.0 cc.
7- 1-12	Klondyke Reservoir	...	...	...	...	...	...	...	...	...	...	...	...	In 0.1 cc.
7- 2-12	Intake	...	...	...	...	...	...	...	...	...	...	...	...	In 0.1 cc.
7- 9-12	Brook	...	...	...	...	...	...	...	...	...	...	...	...	In 0.1 cc.
7-23-12	Intake Reservoir	...	...	...	...	...	...	...	...	...	...	...	...	Absent.
7-23-12	Springs	...	...	...	...	...	...	...	...	...	...	...	...	In 1.0 cc.
7-23-12	Brook	...	...	...	...	...	...	...	...	...	...	...	...	In 1.0 cc.
7-23-12	Brook	...	...	...	...	...	...	...	...	...	...	...	...	In 0.1 cc.
8-26-12	Tap	0	1-e	0	40	33	.020	.072	.002	.16	4.0	25.	0	In 1.0 cc.
10-18-12	Mountain Spring	...	...	...	...	...	...	...	...	...	...	...	...	Absent.
10-18-12	Lower Reservoir	...	...	...	...	...	...	...	...	...	...	...	...	In 10.0 cc.
10-18-12	Upper Reservoir	...	...	...	...	...	...	...	...	...	...	...	...	In 0.1 cc.
10-18-12	Intake Reservoir	...	...	...	...	...	...	...	...	...	...	...	...	In 1.0 cc.
10-18-12	Klondyke Reservoir	...	...	...	...	...	...	...	...	...	...	...	...	In 1.0 cc.
10-18-12	Ice Pond	...	...	...	...	...	...	...	...	...	...	...	...	In 1.0 cc.
BURLINGTON COUNTY ALMSHOUSE, NEW LISBON.														
12-15-11	Dug Well, 35 ft.	0	2-e	0	.....	.....	.014	.100	.003	.80	37.5	138.	.....	In 10.0 cc.
3-20-12	Dug Well, 35 ft.	0	2-e	0	412	338	.006	.080	.000	2.0	38.5	157.	0.4	Absent.
NEW JERSEY REFORMATORY, RAHWAY.														
8- 6-12	Dug Well, 23 ft.	Rd	Disag.	Rd ppt.	.....	.....	.508	.272	.001	.12	20.0	136.	.....	In 0.1 cc.
8-12-12	Dug Well, 20 ft.	0	1-e	Slt.	.....	.....	.110	.080	.001	.12	12.5	.....	.....	In 0.1 cc.
NEW JERSEY STATE VILLAGE FOR EP ILEPTICS, SKILLMAN.														
11- 1-11	Raw Water	...	...	...	...	...	...	...	...	...	...	...	...	In 1.0 cc.
11- 1-11	Tap-Filtered and Sterilized Water.	...	...	...	...	...	...	...	...	...	...	...	...	Absent.

* Iron ppt.
† Acid.

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RECORD OF ANALYSES OF WATER FROM THE SUPPLIES OF STATE INSTITUTIONS.

Results of Chemical Analyses Expressed in parts per million.

DATE.	SOURCE OF SAMPLE.	Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Iron.	B. Coli (Indicated.)
							Free Ammonia.	Alb. Ammonia.	Nitrites.	Nitrates.				
1- 5-12	Raw Water	...	...	...	...	...	...	...	...	...	...	...	...	In 10.0 cc.
1- 5-12	Tap-Filtered Water	...	...	...	...	...	...	...	...	...	...	...	...	Absent.
2-28-12	Raw Water	...	...	...	...	...	...	...	...	...	...	...	...	In 1.0 cc.
2-28-12	Tap on Filter Before Washing	...	...	...	...	...	...	...	...	...	...	...	...	Absent.
2-28-12	Tap on Filter After Washing	...	...	...	...	...	...	...	...	...	...	...	...	Absent.
4-12-12	Water Entering Filters	...	...	...	...	...	...	...	...	...	...	...	...	Absent.
4-12-12	Tap-Filtered Water	...	...	...	...	...	...	...	...	...	...	...	...	Absent.
6-22-12	Pond	35	1-e	Slt.	124	.....	.074	.220	.003	0	4.5	45.	1.4	In 0.1 cc.
6-22-12	Tap	0	1-e	0	299	.....	.076	.090	.003	.08	7.0	59.	0.4	In 10.0 cc.
6-22-12	Tap	0	1-e	0	.....	.....	.046	.090	.005	.08	7.0	60.	.....	Absent.
7- 3-12	Creek	...	...	...	...	...	...	...	...	...	...	...	...	In 0.1 cc.
7- 3-12	Reservoir	...	...	...	...	...	...	...	...	...	...	...	...	In 0.1 cc.
7- 3-12	Tap	0	0	0	301	247	.170	.074	.040	.16	8.5	66.	0.3	Absent.
7-10-12	Raw Water from Tank	...	...	...	...	...	...	...	...	...	...	...	...	In 0.1 cc.
7-10-12	Tap-Filtered Water	...	...	...	...	...	...	...	...	...	...	...	...	In 0.1 cc.
7-18-12	Tap	0	0	Slt.	.....	.....	.176	.082	.007	.20	5.0	.....	.....	Absent.
8- 5-12	Raw Water from Tank	20	1-e	25	.....	.....	.080	.362	.000	.00	8.0	97.	.....	In 1.0 cc.
8- 5-12	Tap-Filtered Water	0	0	0	.....	.....	.026	.150	.000	.04	8.0	108.	.....	In 1.0 cc.
8-11-12	Tap	0	2-e	0	.....	.....	.026	.128	.000	.12	7.5	.....	.....	In 10.0 cc.
9-27-12	Raw Water	0	2-e	80	.....	.....	.150	.200	.015	.40	8.5	87.	.....	In 0.1 cc.
9-27-12	Tap—Filtered Water	0	1-e	Slt.	.....	.....	.084	.098	.003	.28	8.5	42.	.....	In 10.0 cc.
10- 9-12	Raw Water	30	2-v	25	.....	.....	.030	.260	.000	.00	7.5	45.	.....	In 10.0 cc.
10- 9-12	Tap	0	1-e	0	.....	.....	.030	.116	.001	.08	7.5	45.	.....	Absent.
	NEW JERSEY STATE HOME FOR GIRLS, TRENTON.													
11-13-11	Tap—Voorhees' Cottage	0	0	Slt.	.....	.....	.008	.016	.001	.52	13.5	.....	.....	Absent.
11-13-11	Tap—Stokes' Cottage	0	0	0	.....	.....	.020	.014	.002	.52	13.5	.....	.....	Absent.
11-13-11	Tap—Main Building	0	0	0	.....	.....	.016	.018	.001	.44	13.5	.....	.....	Absent.
7-13-12	Tap	0	0	Slt.	103	73	.010	.012	.001	.28	7.5	72.	0.2	Absent.
10- 7-12	Tap	0	1-e	0	.....	.....	.026	.028	.002	.00	6.5	76.	.....	In 10.0 cc.
	NEW JERSEY STATE HOSPITAL, TRENTON.													
7-12-12	Tap	0	1-e	0	99	81	.004	.010	.001	.44	7.5	64.	0.1	Absent.
10- 7-12	Tap	0	0	0	.....	.....	.020	.044	.000	.00	6.0	69.	.....	Absent.
	NEW JERSEY TRAINING SCHOOL FOR FEEBLE-MINDED GIRLS AND BOYS, VINELAND.													
1-15-12	Tap	0	0	0	33	20	.008	.024	.002	2.8	6.5	1.	0	Absent.
4-15-12	Tap	0	0	0	52	22	.016	.016	.000	4.0	6.0	2.	0.1	Absent.
7- 1-12	Tap	0	0	0	48	20	.024	.034	.001	2.40	8.0	7.	0	Absent.
10-21-12	Tap	0	1-e	0	.....	.....	.040	.020	.000	2.00	7.0	1.	.....	Absent.

† Iron ppt.
‡ Acid.

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RECORD OF WATER ANALYSES FROM THE
Results of Chemical Analyses

TOWN.	DATE.	PROPRIETOR.	SOURCE OF SAMPLE
Bucks Co. (Pa.)..	Aug. 21. 1912.....	Harry Wilson	Dug well .....
Bucks Co. (Pa.)..	Oct. 12. 1912.....	John Zimmerman	Spring .....
Burlington Co...			
Burlington Twp....	Mch. 22, 1912.....	Nathaniel Cook	Dug well .....
Burlington Twp....	July 11, 1912.....	Ettra Ferran	Dug well 25 ft.....
Dobbins P. O.	July 15, 1912.....	Charles Smith	Dug well 18 ft.....
Dobbins P. O.	July 15, 1912.....	D. Frasier	Dug well 15 ft.....
Florence Twp.	Mch. 22, 1912.....	Elbert Walton	Driven well 155 ft....
Florence Twp.	Mch. 22, 1912.....	Wilkins Bros.	Dug well 15 ft.....
Moorestown	Aug. 5, 1912.....	E. H. Kensler	Dug well 12 ft.....
Moorestown	Aug. 5, 1912.....	E. H. Kensler	Dug well 18 ft.....
Springfield Twp. ..	Mch. 20, 1912.....	Ridgeway Whitcomb ..	Dug well 14 ft.....
Springfield Twp. ..	Mch. 20, 1912.....	Frank Cook	Driven well 160 ft....
Springfield Twp. ..	Mch. 20, 1912.....	Thomas Tracey	Dug well 24 ft.....
Springfield Twp. ..	Mch. 22, 1912.....	Walter Sutton	Dug well 25 ft.....
Springfield Twp. ..	Mch. 25, 1912.....	Tallman Coff	Dug well .....
Springfield Twp. ..	Mch. 25, 1912.....	B. Gaskill	Dug well .....
Springfield Twp. ..	Mch. 25, 1912.....	Albert Haines	Dug well 80 ft.....
Springfield Twp. ..	Mch. 25, 1912.....	Alfred Parker	Dug well .....
Springfield Twp. ..	Mch. 25, 1912.....	I. M. Clinton	Dug well .....
Springfield Twp. ..	Mch. 25, 1912.....	William Markwood ...	Dug well 80 ft.....
Camden Co.—			
Chews	Sept. 9, 1912.....	Frank Kruffen	Spring .....
Essex Co.—			
Belleville	Sept. 20, 1912.....	Jos. Canella	Dug well .....
Belleville	Sept. 23, 1912.....	Jacob Schaefer	Dug well .....
Livingston Twp. ..	Nov. 9, 1911.....	Mrs. Cora Baum	Driven well 80 ft....
Livingston Twp. ..	Oct. 10, 1912.....	F. H. Melker	Roadside pond .....
Hudson Co.—			
Kearny	Sept. 12, 1912.....	M. Samuel & Sons ..	Open well .....
Hunterdon Co.—			
Everittstown	Oct. 23, 1912.....	Geo. H. Scott	Dug well 12 ft.....
Mercer Co.—			
Ewing Twp.	June 10, 1912.....	Orville Drake	Dug well .....
Middlesex Co.—			
Piscataway Twp. .	Feb. 3, 1912.....	W. W. TenEyck	Dug well 50 ft.....
Piscataway Twp. .	Feb. 3, 1912.....	W. W. TenEyck	Driven well 102 ft....
Monmouth Co.—			
Neptune Twp.	Oct. 10, 1912.....	H. Tabre	Dug well .....
Wall Twp.	Oct. 11, 1912.....	Van Dulen	Dug well 20 ft.....
Wall Twp.	Oct. 11, 1912.....	J. M. Martin	Dug well .....
Orange Co. N. Y.			
Unionville	Sept. 9, 1912.....	L. E. Whittaker	Spring .....
Unionville	Sept. 23, 1912.....	L. E. Whittaker	Spring .....
Unionville	Sept. 23, 1912.....	Wm. Richardson	Springs .....
Passaic Co.	Oct. 11, 1912.....	Robert Martin	Well 18 ft.....
Somerset Co.—			
Franklin Twp.	Nov. 17, 1911.....	A. T. Thomas	Dug well .....
N. Brunswick Twp.	Nov. 17, 1911.....	Albert Lewis	Dug well .....
Franklin Twp.	Nov. 17, 1911.....	A. M. Pierson	Dug well 15 ft.....
Sussex Co.—			
Clove	Sept. 23, 1912.....	W. Richman	Spring .....
Quarryville	Oct. 15, 1912.....	Horton Lewis	Driven well 41 ft.....

‡ Acid.

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SUPPLIES OF CREAMERIES AND DAIRIES.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	NITROGEN AS Free Ammonia.	NITROGEN AS Alb. Ammonia.	NITROGEN AS Nitrites.	NITROGEN AS Nitrates.	Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated)
0	0	0	.016	.054	.006	1.60	9.5	.....	....	...	In 1.0 cc.
0	2-v	Slt.	.092	.140	.040	1.60	5.0	.....	....	...	In 1.0 cc.
0	1-e	Slt.	.066	.092	.000	1.40	75.0	.....	....	...	Absent.
0	Disag.	30	.142	.278	.064	.20	78.0	.....	....	...	In 0.1 cc.
0	0	0	.046	.050	.008	9.60	26.0	.....	....	...	In 0.1 cc.
0	0	Slt.	.028	.072	.006	2.60	10.0	....	....	...	In 0.1 cc.
0	Offen.	25	Ppt.	.052	.070	1.20	13.0	.....	....	...	Absent.
0	2-e	0	.006	.000	.000	9.60	11.0	.....	....	...	Absent.
0	1-e	0	.014	.090	.001	1.40	37.5	22.0	....	...	Absent.
0	0	0	.016	.078	.004	5.00	57.0	8.0	....	...	In 1.0 cc.
0	0	0	.010	.046	.002	3.60	83.5	.....	....	...	In 1.0 cc.
25	2-e	25	.118	.026	.000	.00	3.5	.....	....	...	Absent.
10	2-e	Slt.	.016	.024	.002	.60	26.0	.....	....	...	Absent.
0	0	0	.010	.036	.018	12.80	21.5	.....	....	...	In 0.1 cc.
0	2-e	0	.030	.100	.003	10.60	93.0	.....	....	...	In 1.0 cc.
0	0	0	.010	.064	.006	6.00	19.0	.....	....	...	Absent.
0	0	0	.006	.030	.003	0.60	9.5	.....	....	...	Absent.
0	2-e	0	.014	.024	.000	2.40	10.5	.....	....	...	Absent.
10	0	Slt.	.016	.076	.007	3.20	44.0	.....	....	...	In 10.0 cc.
0	0	0	.006	020	.005	4.80	12.5	.....	....	...	In 10.0 cc.
0	Disag.	0	.048	.072	.003	1.48	5.5	.....	....	...	In 0.1 cc.
0	1-e	25	.026	.054	.002	.20	13.5	.....	....	...	In 1.0 cc.
0	0	0	.038	.094	.008	28.80	19.5	.....	....	...	In 1.0 cc.
0	0	0	.042	.044	.002	2.80	9.5	.....	....	...	In 10.0 cc.
0	2-e	Slt.	.024	.140	.001	.00	4.5	.....	....	...	In 10.0 cc.
25	Disag.	25	.156	.210	.011	.20	92.5	.....	....	...	In 0.1 cc.
0	1-e	50	.100	.140	.007	1.00	8.5	.....	....	...	In 0.1 cc.
0	0	0	.004	.012	.002	.20	15.0	.....	....	...	In 1.0 cc.
0	1-e	0	.026	.072	.000	.00	35.0	.....	....	...	In 10.0 cc.
0	1-e	50	.042	.068	.002	.12	15.0	.....	....	...	Absent.
0	1-e	60	.186	.116	.001	.00	23.0	.....	....	...	In 10.0 cc.
0	1-e	Slt.	.330	.120	.006	9.60	58.0	.....	....	...	In 1.0 cc.
0	2-e	0	.006	.072	.001	4.80	13.5	.....	....	...	In 0.1 cc.
0	1-e	0	.032	.062	.000	4.80	12.5	.....	....	...	Absent.
0	0	0	.026	.074	.000	3.00	14.5	.....	....	...	In 10.0 cc.
35	1-v	0	.076	.192	.001	.04	5.0	.....	....	...	In 1.0 cc.
10	1-v	Slt.	.....	.....	.001	24.00	28.5	.....	....	...	In 0.1 cc.
0	0	Slt.	.020	.050	.004	2.80	15.5	.....	....	...	In 0.1 cc.
10	0	Slt.	.130	.118	.017	3.20	40.0	.....	....	...	In 1.0 cc.
10	0	Slt.	.016	.048	.000	.28	7.0	.....	....	...	In 1.0 cc.
0	Disag.	0	.064	.078	.002	1.00	5.5	.....	....	...	In 0.1 cc.
0	2-v	Slt.	.020	.030	.000	.00	3.5	.....	....	...	In 1.0 cc.

† Iron ppt.

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RECORD OF ANALYSES OF BOTTLED
Results From Machanical Analyses

DATE.	NAME.	SOURCE OF SAMPLE
Aug. 29, 1912.....	Arctic (artesian)	Well at Trenton Junction.....
Mch. 12, 1912.....	Artois	Bottle bought in Trenton.....
Oct. 23, 1912.....	Artois	Well in Hopewell.....
Sept. 17, 1912.....	Belmar	Spring at Glenn Rock.....
Sept. 6, 1912.....	Blue Mountain	Bottling house in Trenton.....
Oct. 24, 1912.....	Culm Rock	Tap at Somerville plant.....
Mch. 29, 1912.....	Echo	Sample in their bottle.....
Mch. 30, 1912.....	Echo	Spring in Ewing Township.....
Aug. 29, 1912.....	Echo	Spring in Ewing Township.....
Mch. 18, 1912.....	Gray Rock	Bottle bought in Trenton.....
Aug. 29, 1912.....	Gray Rock	Well in Ewing Township.....
Mch. 14, 1912.....	Great Bear	Bottle bought in Trenton .....
April 4, 1912.....	Great Rock	Bottle from spring at Whippany.....
April 4, 1912.....	Great Rock	Spring at Whippany.....
June 27, 1912.....	Indian	Spring at Hoboken.....
Mch. 12, 1912.....	Keystone	Bottle bought in Trenton.....
Mch. 12, 1912.....	Keystone	Bottle bought in Trenton.....
Mch. 12, 1912.....	Keystone	Bottle bought in Trenton.....
Mch. 29, 1912.....	Keystone	Bottle bought in Trenton.....
Oct. 23, 1912.....	Keystone	Spring near Taylorsville, Pa.....
April 15, 1912.....	Pilgrim	Spring at Ridgefield Park.....
Sept. 28, 1912.....	Pilgrim	Spring at Ridgefield Park.....
Dec. 20, 1911.....	Polar	Spring at Morrisville, Pa.....
Dec. 20, 1911.....	Polar	Spring at Morrisville, Pa.....
Mch. 14. 1912.....	Polar	Bottle bought in Trenton.....
Aug. 5, 1912.....	Polar	Spring at Morrisville, Pa.....
Sept. 28, 1912.....	Trinity	Spring at Morsemere.....
Aug. 28, 1912.....	Washington Rock	Spring at Warrenville.....
Mch. 7, 1912.....	Washington	Well at Washington's Crossing.....
Mch. 29, 1912.....	Watchung	Bottle bought in Trenton.....
June 20, 1912.....	Watchung	Bottle bought in Trenton.....
June 20, 1912.....	Watchung	Bottle bought in Trenton.....
June 20, 1912.....	Watchung	Bottle bought in Trenton.....
Oct. 1, 1912.....	Watchung	Spring in North Plainfield Township.....
Oct. 1, 1912.....	Watchung	Spring in North Plainfield Township.....

‡ Acid.

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WATERS SOLD IN NEW JERSEY.

Expressed in Parts Per Million.

Color.	Odor, Cold.	Turbidity.	Total Solids.	Mineral Residue.	NITROGEN AS				Chlorine.	Alkalinity.	Hardness, Total.	Iron.	B. Coli (Indicated)
					Free Ammonia.	Alb. Ammonia.	Nitrites.	Nitrates.					
0	1-e	0	....	....	.032	.024	.003	2.60	6.0	78.0	....	...	Absent.
0	0	0	181	164	.014	.016	.013	.00	4.0	115.0	....	0.0	Absent.
0	0	0	....	....	.006	.012	.015	.00	4.5	115.0	....	...	Absent.
0	0	0	181	81	.028	.086	.001	2.60	15.5	63.0	....	0.1	Absent.
0	1-e	0	....	....	.044	.046	.002	.08	2.5	.....	....	...	Absent.
0	0	0	....	....	.006	.008	.000	.00	4.5	82.0	....	...	In 10.0 cc.
0	0	0	....	....	.004	.004	.000	2.00	3.5	13.0	....	...	Absent.
0	0	0	....	....	.002	.004	.002	2.40	4.5	5.0	20.8	...	Absent.
0	1-e	0	....	....	.012	.040	.000	2.40	6.0	82.0	....	...	Absent.
0	0	0	142	126	.140	.026	.000	.04	6.5	91.0	....	0.8	Absent.
0	1-e	Slt.	....	....	.192	.022	.000	.00	7.0	158.0	....	...	Absent.
0	0	0	166	106	.000	.062	.007	1.04	3.5	96.0	....	0.0	Absent.
0	0	0	....	....	.070	.120	.001	1.40	7.5	132.0	91.4	...	In 1.0 cc.
0	0	0	202	170	.016	.014	.000	1.40	7.5	130.0	....	0.0	Absent.
....	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	0	0	92	74	.024	.018	.000	.00	6.5	25.0	41.6	0.0	Absent.
....	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
....	....	.....	....	....	....	....	....	....	....	.....	....	...	Absent.
0	0	0	91	58	.010	.018	.001	1.20	6.5	25.0	28.6	0.0	In 10.0 cc.
0	1-e	0	....	....	.006	.064	.000	1.20	4.5	31.0	....	...	Absent.
0	2-e	0	....	....	.016	.024	.000	9.60	15.0	.....	....	...	Absent.
0	0	0	316	164	.012	.076	.001	8.80	15.0	80.0	....	0.0	In 0.1 cc.
0	0	0	68	48	.002	.010	.000	2.40	2.5	30.0	....	0.0	Absent.
....	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
0	0	0	74	47	.006	.074	.002	2.80	6.5	6.0	....	0.0	Absent.
0	1-e	0	....	....	.032	.076	.001	2.04	5.0	.....	....	...	In 10.0 cc.
0	0	0	148	109	.018	.024	.000	1.60	9.5	33.0	....	0.0	In 1.0 cc.
0	0	0	180	105	.022	.046	.000	.04	4.5	144.0	....	0.0	In 0.1 cc.
0	0	0	....	....	.016	.040	.001	.12	5.5	11.0	31.2	...	Absent.
0	0	0	82	62	.004	.008	.001	.00	5.0	22.0	26.0	0.0	Absent.
0	1-e	0	60	46	.016	.030	.001	.00	5.0	26.0	26.0	0.0	Absent.
0	1-e	0	72	51	.008	.024	.002	.00	5.0	27.0	26.0	0.4	Absent.
....	....	.....	....	....	....	....	....	....	....	.....	....	...	In 10.0 cc.
0	1-e	0	....	....	.006	.046	.000	.00	4.5	.....	....	...	In 10.0 cc.
0	1-e	0	....	....	.014	.058	.000	.00	4.5	.....	....	...	In 1.0 cc.

† Iron ppt

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Report of the Bureau of Vital Statistics.

BY DAVID S. SOUTH, STATE REGISTRAR.

To the Board of Health of the State of New Jersey:

GENTLEMEN—I have the honor to submit the following report of the Bureau of Vital Statistics for the past year:

MARRIAGES.

Probably the most important legislation affecting this department was a complete revision of the marriage license law passed at the last session of the Legislature.

The said revision contains most of the recommendations suggested in my last annual report to the Board, and I think these changes will place this department in a position to procure the exact number of marriages that take place in this State, and at the same time do away entirely with the runaway marriages for which New Jersey was noted. In order to assist local registrars in enforcing this law we have issued from this department a set of rules, as follows:

"MARRIAGE LICENSES.

THE FOLLOWING RULES SHOULD BE OBSERVED BY LOCAL REGISTRARS OF VITAL STATISTICS AND OTHERS WHO HAVE AUTHORITY UNDER THE LAW TO ISSUE MARRIAGE LICENSES.

Both of the contracting parties should appear before the licensing officer when applying for the license.

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The contracting parties should be accompanied by an identifying witness or witnesses, the said witness to be of legal age and residing in the municipality where the application for the license is made.

The law requires the contracting parties to obtain a marriage license twenty-four hours prior to the time the ceremony is to be performed. The licensing officer should, therefore, mark on the license the date and hour of the day (for example 11 A. M. or 3 P. M.) when the license is issued.

Both applicants for the license and the identifying witness should answer and swear to the list of questions contained in the application blanks furnished by the State Bureau of Vital Statistics.

The licensing officer may appoint a deputy to issue licenses in his absence, and the said licensing officer or his deputy have authority to administer oaths to the contracting parties and their identifying witness or witnesses.

In cases where a civil and religious ceremony are to be performed duplicate licenses may be issued (see section 4 of the law).

When such marriage license or licenses are issued they shall only be good and valid for thirty days after the date of issue.

If a license is issued to non-residents of the State it is good only in the municipality where issued, and should have written across the face of the license, 'Good only in the city, borough, town or township of .....' (give name of municipality)."

Under all the old laws of New Jersey in reference to marriage there was no provision made whereby a rabbi of the Jewish faith was authorized to solemnize marriages, therefore at the suggestion of this department such a provision was incorporated in the recent revision, and at the same time all marriages previously solemnized in this manner were made legal.

The importance of this legislation is shown by the marriage-rate in Table 3 of this report, which is 19.13 per 1000 population, the lowest figure of any period during the past six years, indicative of the necessity for such a law. It has been brought to the attention of this department that a few marriage ceremonies have been performed before the twenty-four hours required by law from the time the license is issued, had elapsed, and investigation in each instance has shown that the person performing the ceremony was ignorant of the law, however there should be a provision in the act to require a penalty in such cases.

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Another important amendment which might be added to advantage would be a penalty in cases where local registrars, or assessors, issue licenses without authority, and this defect in the present law has been brought to our notice by the fact that a few registrars have issued licenses to parties in adjoining municipalities. Investigation proved that most of these violations were also unintentional.

Some provision should also be made in the law for procuring marriage licenses in cases where the regular official, or his deputy, are absent or ill.

BIRTHS.

The number of births reported for the year was 58,133, an increase of 4,191 over the past year, and also giving the State the highest birth-rate of any year since 1880, or a period of thirty-two years.

A constant improvement is noticed in the registration of births in this State, and there is no doubt that the present policy in promoting the registration of these vital facts is a success. At the recent meeting of the American Public Health Association held in Washington, D. C., prominent statisticians of the United States and other countries, discussed the matter of reporting births at great length, and at the present time there is a committee of the Association appointed to act in conjunction with a similar committee of the American Medical Association, to the end that a Model Law in reference to the registration of births and deaths may be finally agreed upon and adopted by the registration states of this country.

In some places the school authorities require that all children must present a certificate of their birth upon entrance to school, and I would recommend that your honorable body consult with the State Board of Education in regard to such a provision being incorporated in the school laws of this State.

In New York City the Department of Health issues several thousands of these records for school purposes each year, and if such an amendment is made to our school laws there should also be some provision whereby these records may be procured from the state or local bureaus of vital statistics, free of cost. Such a measure as suggested would protect the school authorities, and at the same time improve the registration of births to a point reaching almost perfection.

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The City Charter of New York provides that the public schools shall be free to all persons over four, and under twenty-one years of age residing in said city, provided, however, that no child under six years of age shall be received in said schools except in kindergarten classes, therefore the Department of Education in New York City have incorporated in their by-laws the following section:

"In admitting a new pupil, the principal shall ascertain and record the birth date of such pupil. The principal shall require the person in parental relation to the child to produce a certificate from the Department of Health, a passport, baptismal certificate, or other satisfactory evidence of the date of birth. When such evidence is not immediately available, the child, if the principal is satisfied that he has passed the seventh birthday, shall be admitted on condition that the necessary record of birth be produced. When such evidence of birth is not produced and the child afterward applies for a certificate of school attendance in order to obtain a permit to go to work, such certificate may be withheld until such evidence is produced that he is of the requisite age.

"A child who in the opinion of the principal is not six years of age shall not be admitted to the grades of the elementary school until the requisite evidence of school age shall have been produced.

"A child shall not be admitted to a kindergarten until the requisite evidence of age shall have been produced."

The above rule is of great advantage in protecting the school authorities of New York City and no doubt a similar addition to the school laws of this State would afford like protection and be the means of improving the registration of births in New Jersey.

DEATHS.

The death-rate of the State per 1000 population, for the year is 14.76, the lowest figure in the history of this department. Reference to the chart on page 51 of this report shows that the death-rate of New Jersey has been gradually decreasing for a number of years.

By referring to the mortality tables prepared by this department and published in this report, it will be noticed that comment on the deaths and death-rates of New Jersey is unnecessary.

There is no doubt that the health officers of the various sanitary districts are aided in their efforts to combat the spread of disease by the annual publication of the various mortality tables which appear in these reports.

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Table 1—Births, Marriages and Deaths by Counties, Cities, Boroughs and Townships for the five years ending December 31, 1911.

ATLANTIC COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Absecon	5	8	4	2	6	2	8	4	7	7	8	8	7	16	14
**Atlantic City	797	724	636	677	885	442	562	697	602	530	699	656	679	800	796
Buena Vista	66	78	73	91	84	22	18	32	37	22	29	43	36	37	46
Brigantine	1	1	0	0	0	0	0	0	0	0	2	2	2	0	0
Egg Harbor City	65	60	62	56	54	23	28	19	27	27	43	34	36	40	37
Egg Harbor Twp.	14	23	27	12	16	12	6	7	7	5	26	22	23	22	15
Folsom Borough	5	5	5	5	4	3	2	3	0	1	0	0	2	1	1
Galloway	21	14	27	20	15	4	4	6	4	4	22	23	16	18	19
Hamilton Township.	26	37	22	39	37	14	10	4	12	12	23	23	38	35	35
Hammonton	113	101	152	166	159	45	34	59	53	62	64	68	93	74	68
Linwood	0	0	7	14	13	0	0	3	6	2	4	0	10	1	10
Longport Borough	0	0	1	0	1	0	2	0	0	2	3	2	3	19	6
Margate City	0	0	2	0	1	0	0	0	0	2	1	1	3	6	3
Mullica	12	14	12	16	15	3	3	4	4	2	11	14	17	13	21
North Field City	11	11	9	8	18	0	1	1	2	2	27	26	27	27	33
Pleasantville	83	66	105	86	127	27	37	41	46	37	47	41	57	82	69
Port Republic City	3	4	4	3	8	6	3	4	5	2	5	3	8	7	11
Somers Point	9	8	7	10	9	2	4	1	4	6	11	11	3	7	7
Ventnor	1	1	2	4	22	0	1	0	2	2	5	6	10	13	15
Weymouth	11	10	10	17	9	0	7	2	4	2	7	8	7	10	7
						*1	*5	*3							

*Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

**The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

NOTE.—The marriage license law of 1910 went into effect on July 1st of that year, therefore the figures marked with a * in the following tables refer only to marriages which took place during the first six months of the year in question. Under the marriage license act which was in force prior to July 1st, 1910, non-residents of this state coming to New Jersey and marrying were required to go to the office of the County Clerk and procure a marriage license.

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BERGEN COUNTY

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Allendale	9	15	14	10	15	6	2	6	3	3	3	12	13	13	13
Alpine Borough	6	8	7	2	6	6	3	2	2	3	7	3	5	5	6
Bergenfield	33	52	38	51	62	11	8	17	19	13	14	21	15	24	13
Bogota	26	19	23	25	25	5	4	6	7	4	21	10	13	15	10
Carlstadt	79	86	96	110	84	24	42	26	30	34	43	36	53	40	45
Cliffside Park	73	80	94	107	112	13	16	30	45	56	23	38	36	52	59
Closter Borough	20	18	20	21	10	6	7	10	5	7	11	10	13	20	12
Cresskill	14	10	13	16	17	3	2	5	3	4	10	9	7	13	6
Delford	13	13	17	13	10	2	5	3	3	3	14	9	7	18	8
Demarest Borough	3	10	5	9	6	....	1	4	3	3	6	10	5	8	10
Dumont	29	41	35	44	56	6	16	11	8	5	17	11	23	19	33
East Rutherford	71	72	93	119	96	15	21	33	45	35	52	54	45	55	56
Edgewater	41	59	55	57	67	10	44	42	31	22	37	34	21	34	38
Emerson	17	17	19	17	19	7	9	8	3	5	10	4	9	5	8
Englewood City	166	174	193	182	193	79	79	70	68	68	143	126	135	156	140
Englewood Cliffs	2	2	5	3	1	1	3	1	1	0	4	3	4	7	6
Fairview	56	38	113	114	96	2	9	5	7	9	25	18	39	33	21
Fort Lee	18	25	60	71	35	14	38	51	31	24	43	47	53	58	43
Franklin	24	31	32	35	24	9	11	12	9	7	23	17	20	20	17
Garfield	165	236	303	374	394	49	46	72	72	82	91	118	140	130	136
Glen Rock	19	16	11	17	10	....	1	4	15	0	3	16	10	9	7
Hackensack City	343	331	322	402	403	122	152	154	185	153	218	170	191	222	218
Harrington Park Borough	5	2	8	7	4	....	2	3	2	1	3	4	2	2	5
Hasbrouck Heights	22	24	24	30	43	10	3	10	15	7	12	20	17	21	19
Haworth Borough	6	10	8	7	5	....	1	3	2	2	3	6	3	5	10
Hillsdale	10	17	16	19	19	3	5	5	5	6	9	7	13	10	16
Hohokus Borough	....	....	....	....	8	....	....	....	....	0	....	....	....	....	6
Hohokus Township	54	16	14	16	19	14	17	10	2	8	38	24	25	18	19
Leonia	2	....	2	4	19	....	1	1	4	8	3	9	0	3	19
Little Ferry	68	43	45	40	77	....	1	6	3	5	25	16	29	23	19
Lodi Borough	61	100	104	126	153	31	13	27	34	36	44	41	43	53	51
Lodi Township	15	14	18	15	7	1	1	1	1	1	10	3	15	3	2
Maywood	23	14	21	20	18	3	4	10	4	2	6	10	15	13	17
Midland	16	25	25	21	20	9	7	13	2	7	54	51	52	63	45
Midland Park	46	54	39	49	45	7	14	5	14	18	15	20	27	20	20
Montvale	6	11	6	12	9	....	....	2	2	0	3	3	7	13	5
Moonachie	....	....	....	15	19	....	....	....	4	0	....	....	....	1	5
North Arlington	2	4	7	12	9	....	....	2	2	2	3	5	4	3	2
Northvale	14	7	7	15	17	1	1	2	2	5	10	15	9	10	5
Norwood Borough	16	13	6	23	8	4	5	4	3	4	8	11	9	4	5
Oakland	21	....	6	8	11	2	....	4	....	0	6	....	3	9	8
Old Tappan	3	2	6	6	2	....	....	2	....	0	3	3	4	4	1
Orvil Township	15	15	14	10	13	7	10	3	4	4	3	14	10	15	13
Overpeck	35	31	78	103	105	10	16	11	21	29	35	44	38	43	53
Palisade	25	33	23	33	31	4	8	3	6	9	23	12	17	12	8
Palisade Park	36	41	45	36	49	2	2	3	7	11	15	21	13	17	24
Park Ridge	28	21	32	24	23	8	8	6	10	6	19	20	20	20	19
Ramsey	....	4	18	32	25	9	....	7	8	14	....	8	27	31	15
Ridgefield Borough	2	22	11	9	16	2	3	6	8	2	9	6	4	1	12
Ridgefield Township	10	3	3	0	1	1	1	2	....	1	1	4	0	5	0
Ridgewood	55	32	84	81	77	22	28	37	34	36	49	46	48	53	70
Riverside	12	12	9	15	9	....	4	0	1	0	5	9	3	3	5
Rivervale Township	7	6	7	6	5	....	1	0	1	0	4	....	8	3	1
Rutherford	85	37	102	100	108	39	41	43	35	52	52	50	53	69	57
Saddle River Borough	3	11	5	5	2	5	2	2	2	2	4	3	13	6	4
Saddle River Township	43	25	49	60	58	5	4	2	7	7	31	20	22	41	36
Teaneck	28	21	35	35	37	4	4	4	3	3	10	10	17	14	19
Tenafly	43	42	52	58	53	5	3	13	17	13	23	32	13	30	24
Union	63	64	86	121	153	8	8	2	33	32	53	56	39	55	61
Upper Saddle River Bor.	4	3	2	4	3	....	....	3	3	1	4	2	0	2	4
Wallington	1	....	1	0	3	....	....	0	2	0	....	....	0	2	5
Washington	2	3	2	8	5	....	1	0	1	0	2	....	5	1	3
Westwood	31	32	32	37	29	7	17	28	12	17	21	18	19	21	20
Woodcliffe	12	9	11	5	10	2	3	2	3	4	7	6	11	7	3
Wood Ridge	35	26	26	29	28	4	4	1	5	4	8	10	13	11	10
						*2	*9	*2	*1						

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

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BURLINGTON COUNTY.

NAME OF PLACE.	BIRTHS.					MARRIAGES.					DEATHS.				
	YEARS.					YEARS.					YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Bass River	2	10	10	9	28	3	6	6	5	7	7	9	8	13	4
Beverly City	46	57	40	51	30	23	26	19	26	15	53	48	53	58	42
Beverly Township	26	36	35	24	32	16	16	15	9	10	41	23	23	35	27
Bordentown City	65	64	74	66	35	38	42	47	36	31	63	71	55	80	81
Bordentown Township	5	6	7	3	7	....	....	1	9	1	9	4	9	1	7
Burlington City	129	127	130	158	151	100	82	74	89	73	155	157	134	150	122
Burlington Township	5	8	9	9	12	2	....	1	1	1	15	23	20	27	21
Chester	125	81	85	99	108	36	39	43	39	26	68	74	77	70	79
Chesterfield	11	16	8	13	16	5	....	1	6	6	9	16	17	17	13
Cinnaminson	12	13	15	24	19	8	7	1	2	2	14	14	8	15	15
Delran	11	21	19	12	23	7	3	3	6	2	16	11	17	24	19
Easthampton	6	11	6	8	6	2	....	0	0	0	2	5	7	2	9
Evesham	27	29	34	31	30	4	4	6	6	3	13	19	19	12	15
Fieldsboro	8	6	9	7	9	7	1	7	7	2	8	11	5	9	6
Florence	94	89	92	84	105	11	18	12	17	18	43	31	55	33	67
Lumberton	18	17	24	14	23	4	5	5	7	9	19	20	22	39	29
Mansfield	7	15	22	17	19	4	6	6	11	10	18	27	26	23	20
Medford	29	41	35	36	37	13	18	10	15	12	59	38	29	35	47
Mount Laurel	36	28	33	25	45	2	....	3	3	0	18	26	16	26	18
New Hanover	8	12	9	10	15	3	7	9	6	9	21	24	23	13	21
Northampton	113	115	103	84	121	77	71	57	54	53	120	129	111	110	111
North Hanover Township	2	2	2	27	2	9	5	14	3	3	8	4	3	4	4
Palmyra	55	39	53	49	53	33	15	15	20	14	37	46	27	40	37
Pemberton Borough	10	10	17	15	15	11	13	10	10	8	13	14	12	11	15
Pemberton Township	5	8	7	5	1	6	2	2	3	7	40	71	62	71	53
Riverside	67	86	87	103	88	33	26	20	31	44	67	47	38	50	50
Riverton Borough	34	37	28	30	40	8	10	16	14	5	20	28	14	16	27
Shamong	1	5	9	4	5	6	3	2	2	0	7	10	3	4	11
Southampton	10	3	28	24	19	7	11	8	7	2	17	18	25	21	25
Springfield	9	14	6	10	5	2	1	1	0	3	17	18	17	12	16
Tabernacle	7	6	5	2	1	1	1	2	2	2	9	3	2	4	7
Washington	13	8	9	11	9	3	....	0	7	4	7	5	6	6	8
Westhampton	6	8	6	5	8	1	2	4	1	0	1	10	5	3	2
Willingboro	7	3	10	5	8	1	....	1	3	1	3	4	15	3	10
Woodland	12	16	12	11	15	....	3	4	0	1	2	4	13	4	5
								*1							5

* Marriage certificate received from County Clerk in which the place where the marriage was performed is not stated.

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CAMDEN COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Audubon Borough	11	22	18	29	15	....	5	1	7	7	7	9	5	9	18
Berlin	....	....	....	30	35	....	....	....	7	17	....	....	....	17	24
Camden City	1643	1866	1603	2006	2172	2919	2709	2960	1985	1387	1506	1471	1480	1627	1626
Centre	56	46	55	45	68	14	4	4	17	8	51	48	48	49	30
Chesilhurst	7	6	10	1	7	....	....	0	2	3	3	5	6	3	7
Clementon	47	40	74	55	65	10	12	11	17	25	32	47	32	46	29
Collingswood	63	74	61	76	91	24	19	21	30	30	53	43	52	44	58
Delaware	29	20	17	26	22	....	....	0	1	3	15	8	6	15	17
Gloucester City	181	219	201	156	221	87	78	73	99	69	167	172	162	147	131
Gloucester Township	48	42	37	42	43	20	16	31	15	9	101	120	92	111	102
Haddon	24	23	14	33	28	12	9	7	4	3	15	14	14	26	11
Haddonfield	56	62	60	56	65	25	30	25	17	22	49	44	51	55	50
Haddon Heights Boro.	16	20	18	24	32	8	4	13	12	9	7	11	9	15	13
Merchantville Borough.	29	38	24	33	23	36	30	30	23	31	16	38	17	26	23
Oaklyn Borough	5	8	10	14	19	1	3	0	23	158	7	7	5	7	6
Pensauken	37	48	43	57	63	11	7	11	51	132	51	48	48	55	45
Voorhees	24	17	15	18	51	7	6	7	5	5	14	16	9	12	16
Waterford	68	75	79	47	32	18	19	20	9	8	34	40	36	33	24
Winslow	34	41	51	72	75	14	4	7	10	8	38	36	36	48	40
Wood Lynne Borough	11	11	7	8	17	3 *3	2 *7	1 *9	5	4	3	3	2	4	7

* Marriage certificates received from County Clerk in w hich the places where the marriages were performed are not stated.

CAPE MAY COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Avalon	3	1	1	1	3	....	1	1	....	0	....	....	3	0	8
**Cape May City	37	27	20	28	25	30	33	18	23	42	50	32	20	42	27
Cape May Point	....	....	0	....	....	1	....	0	....	0	2	....	0	0	0
Dennis	20	24	28	15	23	9	13	13	12	6	22	21	33	21	20
Holly Beach Borough	35	45	33	43	52	9	16	15	25	16	17	17	29	27	29
Lower	16	13	16	28	27	10	4	9	4	8	5	7	20	24	10
Middle	45	55	53	29	46	24	24	23	15	15	33	32	24	42	31
North Wildwood Boro.	....	....	....	17	16	....	....	....	2	2	....	....	6	13	12
Ocean City	26	35	41	48	64	8	13	16	22	26	28	41	50	45	56
Sea Isle City	3	16	14	13	15	5	6	8	5	6	6	11	13	14	8
Upper	23	20	20	21	18	11	9	10	7	14	22	19	26	35	17
West Cape May	5	19	18	19	9	2	1	7	4	7	9	8	15	12	11
Wildwood	7	14	15	14	10	11	8	4	13	21	6	13	7	13	7
Wildwood Crest	....	....	....	....	11	....	....	....	....	0	....	....	....	2	6
Woodbine	80	79	63	73	68	16 *5	9 *2	9	9	12	11	7	8	5	11

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

** The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

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CUMBERLAND COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Bridgeton	213	207	163	236	233	116	111	113	131	132	239	180	210	216	247
Commercial	52	42	46	48	43	24	21	16	12	5	34	21	39	32	37
Deerfield	50	56	50	34	32	12	15	19	12	10	27	27	20	24	39
Downe	30	32	20	24	27	12	5	8	14	12	19	18	24	11	22
Fairfield	29	37	37	39	33	10	5	14	11	4	15	32	12	20	27
Greenwich	28	17	19	32	25	4	2	3	2	7	15	11	15	16	16
Hopewell	12	17	18	24	23	7	5	8	13	6	27	43	30	48	59
Landis	60	79	68	61	68	10	8	8	6	2	69	81	66	63	115
Lawrence	18	29	33	31	37	7	15	5	14	8	24	19	26	19	26
Maurice River	16	27	39	43	38	9	6	15	8	11	31	23	23	28	21
Millville City	291	266	289	257	307	129	94	105	89	97	174	187	151	149	166
Stow Creek	8	8	9	14	21	3	2	2	1	4	8	7	6	7	13
Vineland	145	100	131	165	143	79	82	101	87	80	77	97	118	150	106
						*1	*1	*1							

*Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

ESSEX COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Belleville	141	172	170	245	281	46	46	49	62	66	133	116	190	220	173
Bloomfield City	221	246	259	286	393	58	65	108	137	118	145	158	152	168	146
Caldwell Borough	21	39	48	36	44	12	9	17	19	26	28	38	28	39	23
Caldwell Township	4	8	8	5	9	3	6	0	4	2	10	21	10	5	5
Cedar Grove	....	5	14	10	17	4	4	1	3	4	....	20	63	123	113
East Orange City	490	505	589	600	529	166	145	188	230	213	297	278	322	370	335
Essex Fells	2	6	4	7	9	2	1	3	3	3	....	2	6	4	5
Glen Ridge	21	32	42	46	33	9	11	19	13	13	25	16	24	34	31
Irvington	136	188	179	234	250	38	38	47	49	91	114	99	127	142	160
Livingston	23	6	21	20	18	6	3	5	4	4	16	11	5	16	17
Millburn	61	58	56	69	59	11	12	11	26	24	36	40	36	35	41
Montclair City	410	449	450	456	525	133	156	156	157	159	291	235	277	224	313
Newark City	8105	8613	8739	10023	10592	3660	3475	4108	4148	3703	5736	5198	5516	5784	5451
North Caldwell Boro.	....	2	1	4	4	....	1	0	2	0	3	4	4	1	5
Nutley Borough	74	65	78	90	105	28	20	46	34	32	51	57	49	57	67
Orange City	813	830	654	839	849	243	244	263	280	224	513	525	447	525	540
Roseland Borough	....	8	18	12	10	....	5	1	2	5	....	1	7	6	8
South Orange Boro.	79	77	79	101	115	56	33	45	56	47	65	47	66	61	65
South Orange Twp.	23	46	57	55	62	8	16	14	16	13	24	19	31	36	33
Verona Borough	22	33	19	36	40	14	8	13	13	14	49	18	17	21	33
West Caldwell Boro.	4	6	6	14	16	....	....	1	0	1	7	6	6	6	9
West Orange City	190	220	253	250	295	20	34	41	45	38	95	106	116	95	104
							*12	*8	*6						

*Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

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GLOUCESTER COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Clayton	38	42	46	33	38	7	9	13	6	12	30	18	23	24	31
Deptford	25	40	42	42	62	10	9	10	14	7	33	32	34	37	30
East Greenwich	19	26	28	23	28	11	10	9	12	7	27	20	20	29	26
Elk	9	15	12	8	21	1	4	5	1	1	13	7	8	3	13
Franklin	46	35	35	44	47	9	5	10	15	17	27	34	43	37	35
Glassboro	49	63	54	49	75	38	26	20	43	30	11	29	39	49	48
Greenwich	12	13	14	19	19	3	3	7	5	3	14	4	13	6	16
Harrison	21	30	22	29	32	11	6	5	1	3	25	19	20	20	23
Logan	29	28	26	24	23	7	4	5	5	5	14	21	26	16	16
Mantua	22	30	26	23	21	11	11	8	9	15	19	20	22	18	31
Monroe	24	38	35	44	67	21	13	19	25	24	32	33	31	43	51
National Park Borough	5	5	5	6	5	7	1	0	1	1	....	....	3	2	1
Paulsboro Borough	40	50	39	49	59	3	12	5	8	9	22	25	30	35	44
Pitman Grove Boro.	19	24	35	28	39	13	17	21	13	16	16	20	26	28	28
South Harrison	5	6	8	5	7	1	3	7	2	0	4	3	5	3	4
Swedesboro	18	38	30	28	31	15	17	19	19	21	26	28	34	14	25
Washington	21	28	21	24	31	1	2	1	9	0	19	19	19	16	15
Wenonah	5	3	7	14	12	4	2	6	7	7	4	3	5	8	7
West Deptford	32	36	32	34	26	14	14	9	11	9	40	24	32	33	23
Woodbury	68	67	60	59	57	68	49	61	55	43	72	75	75	64	60
Woolwich	23	25	13	25	16	2	....	0	0	1	8	12	14	11	12
								*3	*1						

*** Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.**

HUDSON COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Bayonne	1668	1719	1721	1800	1980	432	524	571	572	564	763	722	678	827	815
East Newark	29	35	47	51	53	10	9	8	21	17	42	45	39	29	35
Guttenberg	164	144	131	165	185	20	25	27	50	22	65	74	55	67	77
Harrison	224	293	298	324	275	123	127	125	143	130	264	223	180	237	194
Hoboken	1797	1978	1728	1810	1945	1136	2398	2822	2383	1771	1556	1266	1241	1329	1266
Jersey City	4794	4603	3933	4681	5096	2371	4312	5011	4177	3861	4723	4428	4404	4407	4384
Kearny	326	317	356	347	393	103	95	121	123	122	213	237	207	276	267
North Bergen	347	350	321	360	421	63	81	92	79	103	193	195	178	212	217
Secaucus	49	53	32	32	45	7	7	7	14	12	206	212	244	388	376
Town of Union	496	467	429	614	424	222	276	341	334	298	291	294	277	252	233
Weehawken	146	155	147	149	141	50	40	72	53	59	141	105	125	174	204
West Hoboken	751	832	718	838	898	357	388	457	414	311	371	401	420	386	404
West New York	254	265	299	348	424	116	123	116	133	128	136	141	152	169	176

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HUNTERDON COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Alexandria	15	9	9	19	10	2	3	5	4	3	14	14	10	18	14
Bethlehem	16	20	8	21	11	....	4	2	1	0	23	17	8	10	16
Bloomsbury Borough	2	2	8	14	12	3	4	9	7	3	7	3	14	10	20
Clinton Borough	....	....	3	5	8	6	4	5	8	7	19	12	12	13	16
Clinton Township	35	28	24	34	45	8	12	9	15	5	30	28	32	25	36
Delaware	21	28	23	31	18	5	10	12	8	8	26	24	21	28	27
East Amwell	11	16	17	12	23	8	4	5	14	8	18	22	9	23	17
Flemington	....	....	....	19	36	....	....	....	13	20	....	....	....	27	35
Franklin	15	8	12	13	14	4	8	10	10	4	20	9	15	10	18
Frenchtown	11	7	8	8	7	13	10	11	8	12	25	22	17	9	15
Hampton	10	19	16	18	23	11	14	10	6	7	22	16	15	20	9
High Bridge	27	23	20	34	28	11	11	12	8	12	32	18	16	31	26
Holland	17	16	20	14	31	10	12	6	9	6	15	29	23	30	26
Kingwood	12	16	11	17	19	5	2	3	4	7	22	19	14	18	11
Lambertville	126	84	100	98	92	33	34	31	34	46	76	51	72	57	53
Lebanon	23	33	32	23	33	15	11	14	12	10	36	19	41	31	41
Milford	....	....	....	....	5	....	....	....	....	0	....	....	....	....	1
Raritan	31	41	67	54	30	20	24	21	10	6	52	64	36	33	30
Readington	40	31	43	31	33	20	7	22	18	15	41	30	40	38	42
Stockton	14	3	12	16	18	4	3	3	3	1	8	4	8	10	6
Tewksbury	17	21	19	26	24	13	10	12	14	8	26	24	21	22	27
Union	12	23	5	13	13	3	3	2	7	6	13	15	12	16	11
West Amwell	13	11	10	13	15	1	1	5	8	2	5	7	10	10	9
						*2									

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

MERCER COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
East Windsor	8	10	20	15	11	1	1	2	4	1	18	13	8	13	13
Ewing	3	15	12	19	19	5	3	4	4	5	18	23	16	24	21
Hamilton	43	58	72	89	62	30	19	28	12	32	44	54	53	95	62
Hightstown	12	23	25	33	35	19	32	24	12	16	25	24	21	32	27
Hopewell Borough	24	23	14	15	19	4	14	17	13	14	18	22	14	16	12
Hopewell Township	17	18	27	36	34	14	6	6	15	6	32	44	43	52	42
Lawrence	31	26	30	38	44	10	8	6	15	6	..	25	25	26	32
Pennington Borough	....	7	10	9	9	9	7	4	13	6	8	12	9	10	9
Princeton Borough	88	106	78	82	99	49	35	43	51	52	63	104	61	78	73
Princeton Township	15	9	16	8	13	....	....	2	....	1	6	4	2	8	10
Trenton	1088	1139	1375	1566	1895	984	865	965	1093	924	1599	1625	1661	1969	1842
Washington	14	17	13	13	19	4	5	8	2	5	16	17	14	10	13
West Windsor	25	19	18	21	29	2	7	5	3	5	12	13	10	17	20
						*2	*4	*2							

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

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MIDDLESEX COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Cranbury	23	30	31	24	21	7	11	16	15	9	23	38	15	20	20
Dunellen	29	40	35	44	41	9	9	13	6	10	14	31	16	28	25
East Brunswick	17	20	22	16	17	13	9	7	6	4	30	18	13	21	21
Helmetta	10	7	3	9	26	5	2	0	0	1	5	1	1	3	13
Highland Park Borough	11	11	22	36	31	3	8	3	5	2	16	8	11	14	19
Jamesburg	12	28	25	17	14	14	22	11	13	19	5	3	12	14	12
Madison	18	30	22	26	29	....	1	0	2	2	8	12	18	20	15
Metuchen	31	27	35	36	42	14	22	18	13	20	28	26	28	52	36
Milltown	19	26	31	45	40	8	14	13	14	10	17	20	12	15	12
Monroe	16	11	12	20	15	12	6	8	4	2	13	9	7	17	9
New Brunswick	375	426	491	557	676	362	336	338	357	366	468	454	487	496	474
North Brunswick	12	11	11	6	12	2	2	2	0	1	13	9	7	9	16
Perth Amboy	447	427	696	1038	1114	492	358	432	474	376	399	396	432	507	468
Piscataway	52	56	43	60	67	10	8	1	17	15	46	37	38	51	43
Raritan	9	17	22	18	23	8	3	3	3	7	46	37	23	28	34
Roosevelt Borough	115	157	155	171	170	19	35	45	50	104	72	61	56	90	87
Sayreville	166	190	171	211	215	28	17	30	21	15	65	50	52	45	60
South Amboy	52	71	150	162	158	55	27	53	65	72	105	90	94	108	99
South Brunswick	39	27	50	41	59	9	13	10	11	12	44	32	24	42	46
South River	80	134	124	147	186	53	32	33	109	122	69	60	68	52	93
Spottswood Borough	....	....	4	9	24	....	....	3	....	4	....	....	11	5	9
Woodbridge	87	107	134	182	247	30	30	42	49	31	109	103	95	121	111

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MONMOUTH COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Allenhurst	11	2	6	10	11	3	2	6	....	1	9	9	4	5	5
Allentown	1	1	5	3	5	5	9	2	14	8	7	15	9	14	11
**Asbury Park	166	174	188	189	196	128	146	142	116	122	140	157	164	70	145
Atlantic	4	13	5	6	13	1	7	7	7	9	13	13	3	17	12
Atlantic Highlands	16	27	29	35	39	14	18	14	17	15	21	19	13	23	26
Avon	2	12	7	11	9	10	8	5	5	11	15	11	3	11	10
Belmar	20	25	38	36	51	25	33	27	36	15	20	22	24	24	23
Bradley Beach Borough	4	13	32	33	34	1	14	24	21	15	13	20	24	22	23
Deal	2	6	6	4	3	4	4	4	4	5	5	4	5	3	1
Eatontown	32	29	34	44	36	20	20	9	13	12	24	17	13	26	23
Englishtown	1	6	6	9	6	4	2	3	7	9	1	....	0	2	14
Farmingdale	9	13	8	15	13	11	14	9	6	9	10	6	3	5	11
Freehold Borough	68	77	84	61	61	136	44	42	41	31	64	64	57	52	53
Freehold Township	12	10	26	35	25	....	7	3	5	3	25	24	22	25	28
Highlands Borough	11	32	30	44	44	7	10	16	16	15	22	25	14	18	19
Holmdel	8	17	10	17	14	4	3	6	6	3	16	10	7	7	24
Howell	30	38	34	40	32	15	7	7	11	6	35	22	22	29	27
Keyport Borough	....	....	57	70	77	....	....	35	32	33	....	....	44	51	52
**Long Branch	180	149	170	248	274	121	120	119	102	124	288	227	262	292	284
Manalapan	14	21	20	32	14	11	16	13	12	2	8	3	17	8	18
Manasquan	11	8	28	30	30	20	12	25	11	18	15	16	29	20	19
Marlboro	3	12	15	6	13	5	8	3	4	4	19	16	17	15	20
Matawan Borough	15	26	19	28	30	16	6	6	16	19	19	17	31	32	33
Matawan Township	6	22	11	18	31	2	....	8	2	3	26	16	19	28	22
Middletown	54	86	78	73	84	30	18	27	23	24	77	82	89	90	90
Millstone	8	6	14	20	14	1	7	3	4	6	13	9	10	13	14
Monmouth Beach Boro.	6	2	5	3	2	....	2	2	0	0	10	5	1	2	2
Neptune Township	72	98	113	87	88	41	51	41	31	32	99	98	100	104	107
Neptune City Borough.	5	6	12	8	8	1	2	0	0	1	7	5	2	2	4
Ocean	6	17	19	24	21	3	1	4	3	4	8	10	13	23	23
Raritan	76	80	46	39	18	44	39	11	1	7	99	67	30	23	24
Red Bank City	111	122	67	105	120	69	77	30	26	58	91	85	102	113	115
Rumson Borough	17	24	20	21	27	2	6	11	11	9	....	15	15	28	21
Seabright	24	31	19	23	25	1	7	6	10	6	11	12	9	8	17
Shrewsbury	53	50	36	49	28	23	15	19	19	2	42	39	42	58	16
Spring Lake Borough	18	30	31	39	27	6	7	6	12	7	26	26	41	31	45
Upper Freehold	27	22	42	33	27	12	14	8	7	13	30	21	26	27	24
Wall	39	30	36	38	39	21	12	24	19	15	42	36	32	47	34
West Long Branch	....	4	12	8	3	....	6	3	5	1	....	5	6	5	5
						*6	*6	*4	*2						

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

** The death-rate in summer resorts is calculated on the basis of the resident population, whereas the actual population is often several times larger, and on account of this floating population and the large number of invalids included in it, the death-rate is not a criterion of health conditions.

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MORRIS COUNTY.

NAME OF PLACE.	BIRTHS.					MARRIAGES.					DEATHS.				
	YEARS.					YEARS.					YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Boonton City	52	86	95	100	88	39	44	42	36	31	77	73	71	70	61
Boonton Township	2	4	6	5	3	....	1	2	0	0	....	5	5	10	4
Butler	53	54	64	64	75	14	16	21	31	14	18	20	24	30	20
Chatham Borough	25	43	45	43	40	14	15	15	14	7	17	22	18	26	28
Chatham Township	11	3	4	9	8	....	....	2	1	0	6	4	7	7	7
Chester	9	12	15	19	17	6	5	7	8	5	18	12	9	21	10
Dover City	125	138	142	136	199	60	66	73	83	76	104	88	111	100	98
Florham Park Borough	7	4	9	8	1	1	....	0	0	0	4	7	13	10	12
Hanover	38	56	48	53	54	20	15	14	25	17	221	197	235	220	262
Jefferson	8	14	12	9	15	7	4	4	0	3	15	16	12	19	14
Madison	76	90	108	110	121	34	38	36	35	46	74	45	66	51	63
Mendham Borough	26	7	22	26	29	11	1	8	9	9	15	15	25	10	19
Mendham Township	....	18	6	9	3	1	....	3	1	0	....	11	18	6	7
Montville	14	13	14	33	33	2	8	10	11	6	25	17	23	31	22
Morris Township	18	14	27	23	14	....	2	0	3	2	16	13	24	16	26
Morristown City	211	224	238	256	253	100	102	98	110	79	281	267	254	296	293
Mount Arlington	....	1	3	3	7	1	4	2	2	2	7	6	1	5	1
Mount Olive	12	7	21	15	23	5	7	2	5	5	13	15	13	12	15
Netcong	8	19	34	40	64	2	6	11	9	11	8	15	23	21	21
Passaic	40	27	36	38	26	15	4	22	13	14	31	33	20	39	29
Pequannock	24	12	13	27	19	5	4	7	4	12	21	20	26	28	12
Randolph	7	7	4	14	21	4	4	5	5	4	36	34	43	46	33
Rockaway Borough	44	48	46	43	66	15	14	17	20	12	24	29	31	23	25
Rockaway Township	57	46	41	53	39	10	18	9	14	7	96	65	63	57	53
Roxbury	29	26	30	50	63	30	21	31	24	20	28	37	40	39	37
Washington	16	34	22	46	31	13	18	12	15	9	29	20	27	29	29
Wharton Borough	34	27	26	31	35	25	11	33	33	22	34	34	33	40	
							*1								

* Marriage certificate received from County Clerk in which the place where the marriage was performed is not stated.

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OCEAN COUNTY.

NAME OF PLACE.	BIRTHS.					MARRIAGES.					DEATHS.				
	YEARS.					YEARS.					YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Barnegat City	7	13	0	1	0	15	5	0	0	0	1	17	0	0	3
Bay Head	10	1	4	10	14	1	1	3	1	5	....	4	2	3	4
Beach Haven	....	2	3	....	0	6	2	0	2	2	6	3	2	4	2
Berkeley	5	1	11	10	11	1	....	0	1	1	1	6	5	6	12
Brick	25	25	14	25	25	16	9	6	7	7	30	13	29	22	22
Dover	20	33	45	32	43	12	33	26	31	23	32	42	36	28	30
Eagleswood	2	2	2	3	11	1	2	4	2	4	5	5	5	11	3
Harvey Cedars	....	....	....	....	1	....	....	....	....	0	....	....	....	....	0
Island Heights	....	2	0	5	5	5	5	6	0	0	....	....	5	6	4
Jackson	27	21	23	5	14	5	5	5	1	4	12	17	21	23	11
Lacey	6	6	12	7	7	1	2	5	5	4	13	9	12	11	3
Lakewood	66	97	76	81	82	47	48	53	37	37	32	74	64	32	75
Lavalette	....	....	0	1	3	....	....	0	0	0	....	....	0	0	1
Little Egg Harbor	....	6	2	1	3	1	1	0	0	0	2	3	7	6	5
Long Beach	....	....	0	1	1	....	....	0	0	0	....	....	1	6	1
Manchester	13	17	22	14	26	2	5	7	2	3	20	23	16	16	10
Ocean	6	3	5	10	7	1	....	3	2	1	2	7	2	5	4
Plumstead	13	16	19	13	21	13	7	3	10	9	20	21	25	22	25
Point Pleasant Beach Borough	3	14	11	11	14	13	14	10	9	13	3	13	13	13	14
Sea Side Park Borough	1	....	1	....	3	....	....	0	0	0	....	4	4	2	6
Stafford	10	10	7	2	1	9	2	0	4	6	20	4	10	7	6
Tuckerton	14	19	25	13	11	10	6	12	13	3	3	15	20	21	15
Union	10	3	19	19	15	5 *1	.... *2	6 *2	12 *1	5	2	3	12	17	3

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

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PASSAIC COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Acquackanonk	202	237	254	334	379	15	56	44	54	64	71	99	118	139	146
Haledon Borough	20	19	24	39	37	9	7	16	20	12	26	14	18	28	26
Hawthorne	29	11	15	39	38	6	5	1	8	14	22	27	14	34	31
Little Falls	35	41	32	77	73	14	9	24	15	14	42	41	42	53	47
North Haledon	4	8	8	11	5	....	1	2	2	4	3	9	13	9	5
Passaic City	1273	1627	1758	2043	2094	1068	966	957	1267	1070	803	762	783	819	830
Paterson	2491	2634	2299	2557	2546	1233	1160	1340	1037	1236	1839	1867	1888	1850	1891
Pompton	65	90	77	78	68	25	26	21	35	31	48	50	32	49	54
Pompton Lakes Boro...	7	10	16	17	15	8	14	11	15	15	7	4	6	5	10
Prospect Park Borough	15	9	16	30	32	4	11	17	17	10	16	18	24	23	19
Totowa	6	3	4	16	32	....	1	1	1	1	5	8	6	11	12
Wayne	8	9	17	19	29	11	4	9	7	9	17	19	15	31	25
West Milford	22	30	54	28	41	17	17 *2	14 *1	11	20	29	22	27	36	24

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

SALEM COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Alloway	27	30	25	27	21	7	5	5	4	7	13	24	14	22	15
Elmer Borough	12	27	20	21	26	15	6	10	13	9	8	15	17	25	14
Elsinboro	7	10	5	2	7	1	....	0	0	1	1	2	3	5	7
Lower Alloways Creek	27	18	25	23	23	4	9	9	5	3	23	3	21	12	21
Lower Penns Neck	18	22	21	24	22	6	1	6	4	1	17	14	14	12	17
Mannington	15	21	21	23	15	8	8	8	5	4	28	26	17	21	18
Oldmans	25	23	31	13	30	10	10	15	7	12	17	6	12	22	17
Penns Grove Borough	27	48	16	38	34	28	17	13	19	7	28	27	10	27	23
Pilesgrove	28	43	37	43	57	10	7	5	5	9	20	24	19	22	22
Pittsgrove	35	48	26	30	48	....	6	4	5	5	10	13	23	15	23
Quinton	11	8	18	14	5	4	3	10	5	4	14	14	17	15	13
Salem City	76	80	108	118	136	59	50	100	75	72	109	118	91	94	104
Upper Penns Neck	18	10	40	9	18	....	....	6	2	5	4	9	12	11	11
Upper Pittsgrove	19	23	31	28	38	11	6	9	10	4	14	19	24	28	20
Woodstown	21	19	29	20	25	14 *2	18 *1	26 *1	23	8	27	21	18	26	21

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

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SOMERSET COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Bedminster	34	41	17	64	50	13	7	12	14	8	27	22	27	22	32
Bernards	57	43	81	81	84	25	28	40	28	24	33	50	49	55	43
Bound Brook Borough	87	84	47	93	144	37	46	49	44	42	43	56	51	50	45
Branchburg	13	16	12	13	19	7	3	1	7	3	6	5	15	10	22
Bridgewater	23	18	18	21	21	7	6	2	2	2	17	17	13	23	24
Franklin	33	42	21	28	31	16	10	8	13	7	31	31	40	40	37
Hillsborough	38	28	26	35	21	10	13	7	10	11	21	20	26	23	41
Millstone	1	1	1	2	6	1	6	1	0	0	3	1	4	7	8
Montgomery	14	23	12	10	19	9	2	7	5	11	25	24	19	30	18
North Plainfield City	84	109	91	106	103	26	37	42	47	35	87	54	65	78	93
North Plainfield Twp	4	11	3	13	11	4	3	0	3	0	7	7	7	4	11
Raritan	45	38	22	72	87	17	23	17	26	27	48	22	43	39	42
Rocky Hill	19	8	17	16	7	4	1	4	2	0	5	9	8	8	8
Somerville	76	70	74	76	99	48	50	47	52	36	106	95	76	104	98
South Bound Brook	10	15	17	6	18	....	5	2	7	6	16	14	21	21	11
Warren	7	25	8	20	12	2	4	5	4	2	14	12	8	6	14

SUSSEX COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Andover Borough	13	2	13	9	15	9	3	7	2	2	6	11	9	14	6
Andover Township	2	4	8	12	7	1	....	0	0	0	5	2	4	4	5
Branchville	9	8	4	9	14	6	2	5	9	5	12	8	11	12	16
Byram	9	6	10	15	17	....	....	0	0	2	2	10	21	13	10
Frankford	10	6	9	13	12	1	1	4	1	2	10	6	10	12	9
Fredon	6	4	6	8	8	9	5	3	2	4	6	4	9	10	1
Green	10	7	12	10	11	7	1	2	1	5	5	5	3	6	12
Hampton	6	4	8	7	12	4	1	2	2	3	8	4	10	10	5
Hardyston	40	56	35	121	126	29	35	19	29	29	74	74	109	86	75
Hopatcong	2	1	0	2	3	....	....	1	1	0	3	3	4	4	4
Lafayette	13	14	16	7	10	11	8	7	6	8	9	14	11	7	14
Montague	5	7	3	8	3	2	....	6	0	1	27	18	14	7	12
Newton	74	75	61	71	66	47	46	52	47	41	43	48	38	59	76
Sandyston	16	17	16	18	21	9	2	6	1	3	11	18	14	4	13
Sparta	18	24	22	26	27	12	11	14	8	11	22	14	28	28	14
Stanhope Borough	8	25	26	23	17	10	6	18	15	5	13	17	12	14	11
Stillwater	14	10	15	14	9	7	6	4	7	7	9	10	5	14	15
Sussex Borough	11	20	17	15	21	10	18	17	25	12	27	20	16	20	25
Vernon	15	9	12	25	19	8	11	8	9	3	21	22	20	22	13
Walpack	2	5	3	5	5	1	....	1	1	0	5	4	5	3	1
Wantage	13	4	6	16	19	3	4	8 *1	8	7	21	26	37	25	32

* Marriage certificate received from County Clerk in which the place where the marriage was performed is not stated.

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UNION COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Clark	....	5	7	8	6	1	....	1	0	0	6	9	6	3	6
Cranford	77	58	62	75	69	25	24	37	26	33	44	42	38	46	49
Elizabeth	1262	1318	1450	1446	1808	679	578	650	702	671	1194	1084	1141	1124	1202
Fanwood Borough	2	....	5	10	6	1	1	2	0	0	3	4	11	1	6
Fanwood Township	23	5	20	14	34	4	8	20	15	2	17	21	22	21	21
Garwood Borough	21	15	25	29	46	3	1	1	10	9	4	9	10	13	3
Kenilworth Borough	7	18	10	14	13	3	11	8	5	1	6	9	9	8	9
Linden Borough	....	....	7	9	17	8	2	10	7	4	2	1	5	9	16
Linden Township	19	22	21	28	35	3	....	2	4	8	15	11	14	22	31
Mountainside	2	1	5	6	5	....	2	1	2	4	2	1	1	7	4
New Providence Boro.	12	15	11	14	14	5	3	5	9	2	9	5	10	12	12
New Providence Twp.	13	7	1	6	1	....	....	1	1	0	10	4	8	3	2
Plainfield	430	424	430	522	525	186	133	216	193	195	358	334	295	324	295
Rahway	118	112	111	179	171	53	57	73	65	58	125	133	121	99	106
Roselle Borough	25	30	29	30	63	9	17	16	16	23	46	29	28	26	29
Roselle Park	16	42	75	68	68	12	15	8	20	22	16	28	30	31	33
Springfield	35	20	24	20	39	6	5	14	12	4	19	15	13	13	10
Summit City	133	135	143	146	197	52	62	61	40	42	82	106	97	138	87
Union	17	34	45	48	59	6	10	11	11	9	35	28	16	44	25
Westfield	111	84	107	115	115	39	44	43	51	44	71	79	69	78	70

WARREN COUNTY.

NAME OF PLACE.	BIRTHS. YEARS.					MARRIAGES. YEARS.					DEATHS. YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Allamuchy	8	8	6	13	27	1	2	0	0	0	3	5	3	11	7
Alpha	....	....	....	....	50	....	....	....	....	4	....	....	....	....	11
Belvidere	16	25	21	24	29	28	24	20	19	24	34	30	23	21	29
Blairstown	8	12	19	18	21	11	13	10	10	8	18	23	27	18	10
Franklin	25	15	30	35	27	7	2	13	7	11	20	22	23	25	25
Frelinghuysen	9	2	7	8	16	2	6	6	3	4	4	7	14	10	11
Greenwich	17	3	14	19	17	11	8	10	5	6	12	12	10	10	11
Hackettstown	49	51	45	48	47	26	26	14	31	38	50	36	42	58	35
Hardwick	2	6	6	7	4	3	2	1	1	0	9	9	12	6	6
Harmony	17	28	30	37	34	3	2	4	5	2	18	19	18	22	27
Hope	10	5	11	9	10	6	5	5	4	1	16	11	16	13	20
Independence	12	11	18	7	15	3	1	6	4	7	9	11	10	7	14
Knowlton	21	24	27	23	26	13	8	19	5	17	19	25	19	22	19
Lopatcong	4	8	17	7	12	....	....	0	1	0	7	11	11	11	7
Mansfield	8	12	16	19	21	6	8	8	5	5	20	15	23	32	23
Oxford	61	65	62	97	64	23	27	17	31	20	41	48	63	54	56
Pahaquarry	3	3	1	4	1	....	....	0	0	0	10	4	8	4	1
Phillipsburg	196	168	196	164	273	219	162	206	196	143	220	151	158	213	183
Pohatcong	38	32	32	116	79	81	65	40	24	15	47	51	32	55	38
Washington Borough	67	54	57	48	46	38	45	29	45	34	66	47	37	43	46
Washington Township	23	20	21	13	22	11	9	9	1	2	19	13	15	15	17
						*7	*3	*3	*1						

* Marriage certificates received from County Clerk in which the places where the marriages were performed are not stated.

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SUMMARY.

NAME OF PLACE.	BIRTHS.					MARRIAGES.					DEATHS.				
	YEARS.					YEARS.					YEARS.				
	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911	1907	1908	1909	1910	1911
Atlantic County	1243	1165	1167	1226	1483	606	735	890	822	729	1037	991	1077	1228	1213
Bergen County	2245	2401	2658	3074	3096	591	789	866	919	888	1470	1431	1534	1744	1655
Burlington County	1012	1047	1073	1095	1190	486	448	425	448	384	1024	1107	976	1101	1042
Camden County	2389	2678	2403	2828	3144	3216	2964	3231	2339	1938	2169	2180	2110	2349	2282
Cape May County	309	358	346	349	387	143	144	134	141	175	216	221	254	295	253
Cumberland County	952	917	923	998	1030	423	372	418	400	378	759	746	740	783	894
Essex County	10840	11614	11744	13438	14255	4517	4339	5144	5309	4800	7638	7015	7499	8072	7681
Gloucester County	530	642	590	610	716	257	217	243	262	231	456	446	522	496	539
Hudson County	11045	11211	10210	11519	12280	5010	8405	9770	8496	7398	8964	8343	8200	8753	8648
Hunterdon County	470	439	467	533	548	197	191	209	221	196	530	438	446	489	506
Mercer County	1378	1470	1709	1944	2288	1133	1006	1116	1237	1073	1887	1980	1937	2350	2176
Middlesex County	1620	1853	2289	2875	3227	1153	965	1131	1234	1104	1595	1492	1520	1759	1721
Monmouth County	1132	1345	1418	1594	1622	723	780	784	737	677	1370	1247	1339	1473	1455
Morris County	937	1034	1131	1262	1347	434	429	486	511	413	1218	1119	1240	1263	1253
Ocean County	238	296	301	284	317	165	150	161	140	142	264	288	297	328	280
Passaic County	4177	4728	4574	5288	5389	2410	2279	2460	2489	2500	2932	2940	2986	3087	3120
Salem County	376	430	463	433	508	179	147	227	182	152	343	335	312	357	356
Somerset County	545	572	467	656	732	226	244	244	264	214	489	438	472	520	537
Sussex County	296	308	352	433	442	186	160	185	174	150	340	338	390	375	370
Union County	2323	2345	2588	2787	3291	1095	978	1180	1189	1131	2064	1952	1944	2022	2015
Warren County	594	552	636	716	841	499	418	420	398	341	642	550	564	650	616
	44651	47405	47508	53942	58133	23649	26155	29724	27912	25014	37408	35597	36359	39494	38612

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TABLE 2.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1911—

		Atlantic.	Bergen.	Burlington.	Camden.	Cape May.	Cumberland.	Essex.	Gloucester.	Hudson.	Hunterdon.	Mercer.	Middlesex.	Monmouth.	Morris.	Ocean.	Passaic.	Salem.	Somerset.	Sussex.	Union.	Warren.	Total.
Typhoid Fever	1	16	10	9	18	1	8	55	13	54	1	50	14	28	7	3	17	7	9	2	12	3	337
Typhus Fever	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Relapsing Fever	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Malaria	4	....	1	....	....	....	....	4	2	6	1	....	2	3	2	1	....	....	....	1	1	....	24
Including Malarial Cachexia	4A	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1
Smallpox	5	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
Measles	6	2	30	8	20	1	4	28	11	34	5	22	4	....	4	1	16	4	....	....	11	15	281
Scarlet Fever	7	4	13	7	6	....	4	52	....	64	1	7	15	3	6	....	14	1	....	....	17	....	214
Whooping Cough	8	13	24	6	18	1	1	77	6	39	1	28	23	6	14	3	24	....	3	1	19	7	264
Diphtheria and Croup	9	15	19	7	26	3	15	96	7	110	1	30	26	14	12	3	40	2	2	....	24	6	458
Including Croup	9A	1	3	3	16	1	1	13	1	39	3	9	6	2	2	1	6	2	4	1	1	2	110
Influenza	10	2	4	4	3	....	3	12	1	5	2	2	2	3	14	2	4	4	3	5	7	6	88
Miliary Fever	11	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Asiatic Cholera	12	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Cholera Nostras	13	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Dysentery	14	10	6	1	3	....	3	18	1	10	....	6	9	9	2	2	7	1	5	1	4	1	104
Plague	15	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Yellow Fever	16	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Leprosy	17	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Erysipelas	18	2	2	3	4	1	1	19	1	33	1	5	2	3	....	1	7	1	1	....	3	2	97
Other Epidemic Diseases	19	....	....	....	1	....	....	....	....	2	1	....	1	....	....	....	2	....	....	....	....	1	8
Purulent Infection and Septichaemia	20	1	....	1	6	....	1	3	....	6	1	3	2	1	2	....	....	1	1	2	5	1	42
Glanders	21	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Anthrax	22	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Rabies	23	....	1	....	....	....	1	....	1	5	....	....	2	2	....	....	1	....	....	....	....	....	13
Tetanus	24	....	1	1	6	....	2	3	1	5	....	2	1	....	....	....	5	1	1	....	3	....	32
Mycoses	25	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Pellagra	26	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	2
Beriberi	27	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
Tuberculosis of the Lungs	28	91	151	92	252	15	86	880	58	102	49	214	126	124	110	25	316	33	34	30	163	32	3,907
Acute Miliary Tuberculosis	29	5	6	1	7	....	2	17	2	15	3	4	3	3	1	1	4	....	1	....	4	3	79
Tuberculosis Meningitis	30	2	21	6	8	....	5	79	2	63	1	17	3	8	8	....	20	3	7	2	20	1	281
Abdominal Tuberculosis	31	4	5	8	9	4	5	40	2	34	....	9	5	3	4	....	10	....	1	....	6	2	151
Pott's Disease	32	....	....	....	1	....	....	4	....	1	....	....	....	....	....	....	1	....	....	....	....	....	7
White Swellings	33	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Tuberculosis of Other Organs	34	4	2	3	3	1	4	21	....	15	2	6	1	2	4	1	4	2	....	....	1	....	76
Disseminated Tuberculosis	35	1	4	2	3	....	....	7	1	7	2	2	3	1	1	1	2	....	....	....	2	....	37
Rickets	36	....	....	....	1	....	....	7	....	3	....	4	1	1	....	1	2	....	6	....	4	....	30

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TABLE 2.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1911—*Continued.*

	Atlantic.	Bergen.	Burlington.	Camden.	Cape May.	Cumberland.	Essex.	Gloucester.	Hudson.	Hunterdon.	Mercer.	Middlesex.	Monmouth.	Morris.	Ocean.	Passaic.	Salem.	Somerset.	Sussex.	Union.	Warren.	Total.
Syphilis 37	9	2	4	3	....	3	10	....	21	....	7	4	5	3	....	6	....	1	1	3	4	86
Gonococcus Infection 38	1	1	....	1	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5
Cancer and Other Malignant Tumors of the Buccal Cavity 39	2	6	6	6	....	2	21	....	17	1	5	3	3	3	1	7	....	4	1	3	....	91
Cancer and Other Malignant Tumors of the Stomach, liver 40	23	41	26	44	7	39	162	11	169	13	36	33	40	31	9	73	10	11	15	61	12	866
Cancer and Other Malignant Tumors of the peritonæum, intestines, rectum 41	8	12	10	12	2	6	64	3	40	3	13	10	8	9	6	26	4	3	4	15	4	262
Cancer and Other Malignant Tumors of the Female Genital Organs ..42	11	11	8	23	1	7	68	3	65	6	17	8	18	10	2	20	2	5	2	16	3	306
Cancer and Other Malignant Tumors of the Breast 43	8	6	11	5	1	7	38	9	35	3	7	6	15	8	1	7	2	4	....	12	1	186
Cancer and Other Malignant Tumors of the Skin 44	4	....	1	5	....	2	10	1	12	....	4	3	2	4	....	3	3	....	1	5	1	61
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified 45	3	10	7	9	....	6	37	1	33	3	6	5	11	4	1	18	2	5	....	8	1	170
Other Tumors (tumors of the female genital organs excepted). 46	1	1	....	2	....	1	4	....	3	....	1	1	1	1	....	1	....	1	1	....	....	18
Acute Articular Rheumatism 47	6	3	3	10	1	1	9	....	21	2	3	4	3	3	....	5	3	1	1	9	6	94
Chronic Rheumatism and Gout ...48	....	3	1	2	1	1	2	1	3	....	....	....	....	....	....	....	....	....	....	....	....	13
Scurvy 49	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	1	....	....	....	....	1	4
Diabetes 50	17	9	3	14	1	6	56	....	57	2	16	8	15	5	3	22	3	4	1	17	3	267
Exophthalmic Goitre 51	....	....	....	1	....	....	4	....	2	....	1	....	1	....	....	1	....	....	....	....	....	10
Addison's Disease 52	....	1	....	....	....	....	....	1	1	....	....	....	1	....	1	1	....	....	....	....	....	6
Leuchæmia 53	2	2	1	2	....	....	12	....	4	....	1	1	1	1	....	1	....	....	....	3	....	31
Anæmia, Chlorosis 54	5	3	1	5	....	....	17	1	16	....	3	3	....	4	1	3	2	1	....	6	1	77
Other General Diseases 55	1	4	1	5	....	2	4	....	12	....	....	3	4	3	....	10	....	3	1	7	2	62
Alcoholism (acute or chronic) 56	12	10	11	12	2	3	63	....	44	1	15	11	10	3	1	7	2	2	3	13	5	229
Chronic Lead Poisoning 57	....	....	....	1	....	....	1	....	1	....	....	....	....	....	1	....	....	1	....	....	....	5
Other Chronic Occupation Poisonings 58	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Other Chronic Poisonings 59	....	....	....	....	....	1	....	....	3	....	....	1	....	....	....	1	....	....	1	....	....	7
Encephalitis 60	1	1	1	....	....	1	3	....	2	....	....	1	1	1	....	2	....	....	....	1	....	15
Simple Meningitis 61	6	12	7	19	3	7	65	1	108	3	14	26	10	9	1	54	3	3	3	12	5	371
Including Cerebrospinal Fever ..61A	2	3	....	3	....	1	24	....	54	....	4	5	5	3	....	12	....	1	....	9	1	127
Locomotor Ataxia 62	4	5	....	1	2	2	7	1	6	1	2	1	1	1	....	2	....	....	3	2	1	42

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TABLE 2.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1911— *Continued.*

	Atlantic.	Bergen.	Burlington.	Camden.	Cape May.	Cumberland.	Essex.	Gloucester.	Hudson.	Hunterdon.	Mercer.	Middlesex.	Monmouth.	Morris.	Ocean.	Passaic.	Salem.	Somerset.	Sussex.	Union.	Warren.	Total.
Other diseases of the spinal cord ..63	6	6	2	6	1	3	26	3	29	2	2	6	5	5	1	3	3	3	1	11	4	133
Cerebral hæmorrhage, apoplexy ..64	70	119	93	156	28	75	508	44	442	69	124	88	150	82	35	132	33	40	36	146	61	2522
Softening of the brain 65	....	....	3	5	....	6	6	....	5	4	4	....	7	2	1	1	1	....	4	3	4	56
Paralysis without specified cause ..66	14	14	23	44	5	37	43	17	55	3	30	21	27	8	3	24	22	8	6	11	9	429
General paralysis of the insane 67	....	....	....	4	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	6
Other forms of mental alienation..68	1	3	3	15	....	2	31	2	21	3	16	2	3	37	....	8	3	3	1	12	1	167
Epilepsy 69	2	6	4	6	....	4	15	2	16	4	6	2	2	6	....	4	....	4	....	6	1	90
Convulsions (nonpuerperal) 70	....	....	....	....	....	....	1	....	....	....	....	1	....	1	1	....	....	1	....	....	....	5
Convulsions of infants 71	1	8	1	18	2	4	49	1	82	4	19	30	9	4	2	29	2	3	5	7	6	286
Chorea 72	....	....	....	....	....	....	1	....	1	....	1	1	....	....	....	6	....	....	....	....	....	10
Neuralgia and Neuritis 73	1	....	....	1	....	....	3	....	4	....	2	1	....	1	....	4	....	....	....	....	....	17
Other diseases of the nervous system 74	3	....	3	2	1	4	2	....	1	1	2	2	2	2	....	1	1	....	....	2	1	30
Other diseases of the eyes and their adnexa 75	1	....	....	....	....	....	1	....	1	....	1	....	....	....	....	....	....	....	....	....	....	4
Diseases of the ears 76	....	1	....	....	....	....	5	....	5	....	2	....	2	1	1	2	....	....	....	....	....	19
Pericarditis 77	....	2	....	5	....	....	7	1	4	....	3	2	3	....	....	5	....	1	....	4	4	41
Acute endocarditis 78	40	55	37	65	3	13	381	6	307	3	40	32	52	39	5	145	2	21	7	110	13	1,381
Organic diseases of the heart 79	96	111	76	148	18	94	368	44	426	47	180	104	130	89	29	202	28	45	31	88	49	2,403
Angina pectoris 80	13	7	10	7	1	2	26	4	21	3	8	1	8	10	2	8	....	6	2	6	1	151
Diseases of the arteries, atheroma, aneurysm, etc. 81	16	23	10	24	4	8	108	7	34	10	53	6	28	17	1	16	1	5	3	20	11	455
Embolism and thrombosis 82	2	3	2	2	....	2	6	....	5	1	2	....	....	....	....	4	....	....	1	1	1	31
Diseases of the veins (varices, hæmorrhoids, phlebitis, etc.) ...83	....	....	....	2	....	....	3	....	4	....	....	....	....	1	....	1	....	....	....	2	....	13
Diseases of the lymphatic system (lymphangitis, etc.) 84	....	....	1	....	....	2	5	....	2	....	3	....	....	1	....	....	....	....	....	2	....	16
Hæmorrhage; other diseases of the circulatory system 85	....	....	....	1	....	....	1	....	1	....	....	....	1	....	1	....	....	1	....	....	....	6
Diseases of the nasal fossæ 86	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	2
Diseases of the larynx 87	1	3	3	2	....	4	6	....	7	3	3	3	1	2	1	7	....	4	3	....	....	56
Diseases of the thyreoid body.....88	....	....	....	....	....	....	3	....	1	....	3	1	....	....	....	....	....	....	....	2	....	10
Acute bronchitis 89	3	14	5	13	3	4	89	4	115	5	14	23	19	15	2	32	4	10	4	3	3	389
Chronic bronchitis 90	6	1	5	2	....	4	31	5	32	1	3	5	6	5	....	13	1	....	1	12	1	134
Bronchopneumonia 91	15	50	12	51	3	4	293	6	373	10	86	44	22	31	3	123	6	11	13	81	11	1,248
Pneumonia 92	73	132	70	216	11	49	542	36	730	21	185	114	85	160	17	250	25	42	26	156	63	3,024
Pleurisy 93	3	11	7	5	....	5	59	3	50	2	14	13	9	6	1	15	1	3	3	6	9	220
Pulmonary congestion, pulmonary apoplexy 94	13	33	10	33	2	9	108	5	141	3	19	11	19	16	5	42	....	10	6	33	4	537

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TABLE 2.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1911—*Continued.*

		Atlantic.	Bergen.	Burlington.	Camden.	Cape May.	Cumberland.	Essex.	Gloucester.	Hudson.	Hunterdon.	Mercer.	Middlesex.	Monmouth.	Morris.	Ocean.	Passaic.	Salem.	Somerset.	Sussex.	Union.	Warren.	Total.
Gangrene of the lung	95	....	....	....	....	....	....	4	....	1	....	1	1	1	....	....	....	....	....	....	2	....	10
Asthma	96	9	7	1	6	....	4	24	3	26	1	6	6	1	3	1	12	3	1	1	1	2	118
Pulmonary emphysema	97	....	....	....	....	....	....	1	....	1	....	1	....	1	....	....	2	....	....	....	....	....	6
Other diseases of the respiratory system (tuberculosis excepted)	98	2	2	1	2	3	1	2	2	10	1	3	....	1	....	....	9	....	....	1	5	1	46
Other diseases of the mouth and annexa	99	....	1	....	1	....	....	3	....	4	1	....	....	....	1	....	1	1	....	....	2	....	15
Diseases of the pharynx	100	....	3	1	1	....	1	6	....	12	....	3	1	1	2	1	3	....	....	1	5	1	42
Diseases of the œsophagus	101	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	2
Ulcer of the stomach	102	10	4	1	1	1	2	18	1	20	....	9	2	5	6	....	5	2	....	....	6	1	94
Other diseases of the stomach (cancer excepted)	103	16	15	19	18	9	16	123	12	74	4	28	21	36	14	5	33	5	11	6	22	11	498
Diarrhœa and enteritis (under 2 years)	104	74	99	59	132	21	49	503	29	582	13	128	249	61	46	5	240	16	28	13	150	27	2,524
Diarrhœa and enteritis (2 years and over)	105	26	14	24	18	5	13	87	4	123	12	19	20	25	19	6	33	6	7	7	18	10	506
Ankylostomiasis	106	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1
Intestinal parasites	107	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1
Appendicitis and typhlitis	108	7	13	4	8	1	7	59	1	56	2	10	10	8	3	1	26	1	1	1	11	....	230
Hernias, intestinal obstructions	109	17	9	5	10	1	9	47	5	55	1	11	6	10	8	2	22	2	2	....	10	1	233
Other diseases of the intestines	110	6	7	1	5	1	3	15	1	6	4	3	4	3	1	....	10	3	1	1	5	1	81
Acute yellow atrophy of the liver	111	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hydatid tumor of the liver	112	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	2
Cirrhosis of the liver	113	6	13	12	18	1	4	87	1	105	2	13	12	5	5	4	17	1	3	7	14	2	332
Biliary calculi	114	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	1	....	....	....	....	....	3
Other diseases of the liver	115	3	2	5	12	1	2	19	4	19	2	13	3	5	5	....	9	3	....	....	4	1	111
Diseases of the spleen	116	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	1	1	....	....	1	....	5
Simple peritonitis (nonpuerperal)	117	1	....	....	3	....	....	6	....	14	2	5	1	3	2	....	3	....	2	....	4	2	48
Other diseases of the digestive system (cancer and tuberculosis excepted)	118	2	1	1	....	....	....	5	....	2	....	....	....	....	....	....	3	....	1	....	1	1	17
Acute nephritis	119	6	5	3	6	1	2	15	2	22	1	1	2	6	2	1	10	1	....	2	4	1	93
Bright's disease	120	80	92	83	189	37	64	546	43	638	41	148	87	109	74	28	194	19	41	16	111	39	2,679
Chyluria	121	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1
Other diseases of the kidneys and annexa	122	3	1	1	1	....	1	3	1	9	....	5	1	....	1	....	6	1	1	....	1	....	41
Calculi of the urinary passages	123	....	4	1	2	2	1	15	1	9	1	1	3	2	....	....	5	....	....	1	3	4	55
Diseases of the bladder	124	4	5	1	7	....	4	20	2	13	1	3	3	6	5	....	8	....	1	1	7	4	95

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TABLE 2.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1911—*Continued.*

	Atlantic.	Bergen.	Burlington.	Camden.	Cape May.	Cumberland.	Essex.	Gloucester.	Hudson.	Hunterdon.	Mercer.	Middlesex.	Monmouth.	Morris.	Ocean.	Passaic.	Salem.	Somerset.	Sussex.	Union.	Warren.	Total.
Other diseases of the urethra, urinary abscess, etc. 125	....	1	....	1	....	....	....	....	3	....	1	1	....	2	....	2	....	....	1	....	....	12
Diseases of the prostate 126	2	3	2	....	....	....	4	....	5	2	4	2	1	1	1	6	1	....	2	2	1	39
Nonvenereal diseases of the male genital organs 127	....	....	....	....	....	1	1	....	1	....	....	1	....	....	....	....	....	....	....	....	....	4
Uterine hæmorrhage (nonpuerperal) 128	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Uterine tumor (noncancerous) 129	....	1	1	3	....	....	11	....	14	1	1	1	1	....	....	4	....	2	3	1	....	44
Other diseases of the uterus..... 130	....	2	....	2	....	....	7	....	8	....	2	1	2	1	....	1	....	....	....	1	....	27
Cysts and other tumors of the ovary 131	....	2	2	4	....	....	3	....	10	....	....	1	....	....	....	....	....	....	....	1	....	23
Salpingitis and other diseases of the female genital organs 132	1	....	2	1	....	3	12	2	14	....	6	1	2	1	....	5	....	....	....	....	....	50
Nonpuerperal diseases of the breast (cancer excepted) 133	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	2
Accidents of pregnancy 134	....	....	4	6	....	1	12	....	13	....	3	3	1	2	....	5	....	....	1	10	1	62
Puerperal hæmorrhage 135	3	4	3	6	....	1	17	....	9	2	4	4	6	2	....	7	1	1	2	4	1	77
Other accidents of labor 136	....	2	1	2	1	....	10	....	14	2	....	3	....	....	....	6	....	....	1	2	....	44
Puerperal septichæmia 137	7	4	1	6	....	2	29	2	29	....	13	3	3	....	....	19	1	1	2	3	2	122
Puerperal albuminuria and convulsions 138	5	1	3	9	1	2	21	3	23	....	....	2	3	3	....	6	....	3	....	3	....	98
Puerperal phlegmasia alba dolens embolus, sudden death.... 139	....	....	....	1	....	....	3	....	5	....	....	....	....	1	....	....	....	....	....	1	....	11
Following childbirth (not otherwise defined) 140	....	1	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	3
Puerperal diseases of the breast .141	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Gangrene 142	2	1	2	7	1	4	5	1	14	3	2	....	3	3	1	2	1	2	....	2	2	58
Furuncle 143	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Acute abscess 144	....	....	1	2	....	....	6	....	4	....	2	3	1	1	....	2	1	....	1	....	....	24
Other diseases of the skin and annexa 145	3	1	1	7	....	3	11	1	11	2	5	4	1	....	....	5	1	1	4	3	....	64
Diseases of the bones (tuberculosis excepted) 146	....	1	1	2	3	1	3	....	16	2	3	....	1	1	....	5	....	1	....	2	....	47
Diseases of the bones (tuberculosis and rheumatism excepted 147	....	2	....	1	....	....	1	....	2	....	....	....	....	....	....	....	....	....	....	....	....	6
Amputations 148	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1
Other diseases of the organs of locomotion 149	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

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TABLE 2.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1911—*Continued.*

		Atlantic.	Bergen.	Burlington.	Camden.	Cape May.	Cumberland.	Essex.	Gloucester.	Hudson.	Hunterdon.	Mercer.	Middlesex.	Monmouth.	Morris.	Ocean.	Passaic.	Salem.	Somerset.	Sussex.	Union.	Warren.	Total.
Congenital malformations (still-births not included)	150	3	3	2	6	....	2	15	1	20	2	3	11	8	6	4	4	2	....	1	4	2	99
Congenital debility, icterus, and sclerema	151	55	82	36	122	3	29	304	34	395	11	99	101	42	41	12	167	14	16	15	103	19	1,700
Other diseases peculiar to early infancy	152	10	14	7	20	1	6	88	8	56	5	3	22	12	8	....	19	10	5	2	14	4	319
Lack of care	153	....	....	1	1	....	4	8	....	5	....	1	....	....	1	....	....	1	....	1	1	....	24
Senility	154	27	15	25	20	11	14	63	3	50	14	16	27	23	15	4	24	3	10	2	16	11	403
Suicide by poison	155	4	3	1	7	....	1	28	....	31	....	5	5	2	2	....	9	1	2	....	5	1	107
Suicide by asphyxia	156	6	6	....	3	....	....	27	....	15	....	....	....	1	....	....	9	....	....	....	5	1	73
Suicide by hanging or strangulation	157	2	5	2	6	....	1	18	1	15	....	3	2	1	2	....	6	....	2	1	3	3	73
Suicide by drowning	158	....	1	2	1	....	1	3	1	4	1	2	2	....	....	1	3	....	....	....	....	....	22
Suicide by firearms	159	5	13	4	5	....	4	21	....	21	1	4	7	5	4	1	7	....	....	....	3	3	113
Suicide by cutting or piercing instruments	160	2	1	1	1	1	....	2	....	2	....	2	....	2	....	....	2	....	1	....	2	....	19
Suicide by jumping from a high place	161	1	....	....	....	....	....	2	....	1	....	....	....	....	....	....	....	....	....	....	....	....	4
Suicide by crushing	162	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1
Other suicides	163	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	2
Poisoning by food	164	....	....	2	....	....	....	2	....	....	....	....	....	....	1	....	2	....	....	....	....	....	7
Other acute poisonings	165	1	2	1	2	1	1	6	....	11	1	3	....	1	2	....	7	....	....	....	3	....	42
Conflagration	166	2	....	1	1	....	1	5	....	5	....	2	....	1	4	1	....	1	....	1	....	....	25
Burns (conflagration excepted)	167	7	11	3	20	....	5	52	3	61	4	13	15	8	11	1	16	1	4	1	18	3	257
Absorption of deleterious gases (conflagration excepted)	168	13	1	....	1	1	1	25	....	39	....	1	2	1	....	....	11	....	....	....	11	....	107
Accidental drowning	169	7	26	18	27	3	8	35	5	78	4	16	26	14	17	4	22	5	2	7	7	4	335
Traumatism by firearms	170	4	2	2	2	....	2	3	....	3	1	3	1	1	1	....	1	....	....	2	1	2	31
Traumatism by cutting or piercing instruments	171	....	....	....	....	....	....	....	....	1	....	....	2	....	....	....	....	....	....	....	....	....	3
Traumatism by fall	172	12	17	4	32	3	10	68	3	93	3	25	20	15	11	....	34	5	4	2	15	9	390
Traumatism in mines and quarries	173	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	1	....	....	1	....	1	5
Traumatism by machines	174	1	....	....	....	....	....	2	....	2	....	1	2	....	....	....	2	....	....	2	....	1	13
Traumatism by other crushing (vehicles, railroad, landslides, etc.)	175	16	41	12	39	2	3	103	6	178	9	40	51	15	20	4	66	1	12	5	66	27	716
Injuries by animals	176	....	1	....	2	....	1	4	....	1	....	1	1	2	1	....	2	....	....	....	....	1	17
Starvation	177	....	....	....	....	....	....	....	....	3	....	....	1	....	....	....	1	....	....	1	....	....	6

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TABLE 2.—SHOWING NUMBER OF DEATHS IN NEW JERSEY FROM EACH OF THE CLASSIFIED CAUSES, BY COUNTIES, FOR THE YEAR ENDING DECEMBER 31, 1911—*Continued.*

	Atlantic.	Bergen.	Burlington.	Camden.	Cape May.	Cumberland.	Essex.	Gloucester.	Hudson.	Hunterdon.	Mercer.	Middlesex.	Monmouth.	Morris.	Ocean.	Passaic.	Salem.	Somerset.	Sussex.	Union.	Warren.	Total
Excessive cold 178	....	1	....	3	....	....	1	....	1	....	1	1	....	....	....	....	....	....	....	1	....	8
Effects of heat 179	4	2	6	10	1	1	81	1	44	2	13	13	3	16	....	29	....	5	3	14	3	251
Lightning 180	....	....	....	....	....	....	1	1	1	....	....	....	....	2	....	....	....	....	....	....	....	5
Electricity (lightning excepted) .. 181	7	4	....	3	....	1	1	1	3	....	1	1	....	1	....	1	....	....	....	1	....	30
Homicide by firearms 182	3	7	1	1	1	1	7	....	12	....	3	2	3	1	....	7	....	1	1	1	....	52
Homicide by cutting or piercing instruments 183	....	....	....	1	....	....	2	....	2	....	....	....	1	....	....	1	....	....	....	....	....	7
Homicide by other means 184	1	2	2	2	1	1	7	....	5	....	2	1	1	....	1	6	....	....	1	....	....	33
Fractures (cause not specified) .. 185	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Other external violence 186	2	....	....	....	....	....	....	....	3	....	4	....	....	1	....	1	....	....	....	....	....	11
Ill-defined organic disease 187	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	3
Sudden death 188	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....
Cause of death not specified or ill-defined 189	22	26	18	13	3	10	67	7	108	4	37	35	16	21	6	59	5	8	2	33	9	514
																						38,613

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TABLE 3.—SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INHABITANTS IN NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1911.

CITIES.	Estimated population of cities.	Agents.	Architects.	Artists.	Bakers.	Bankers, &c.	Barbers.	Bartenders, &c.	Blacksmiths.	Boatmen.	Boilermakers.	Bookkeepers.	Brass and ironworkers	Brickmakers.	Butchers.	Buttonmakers.	Chauffeurs.	Chemists.	Cigarmakers.	Civil engineers.	Clergymen.	Clerks.	Constables and policemen.	Contractors and carpenters.	Cooks.	Coopers.	Dentists.	Dressmakers.	Drivers, &c.	Druggists.	Dyers.	Editors & journalists.	Electricians.	Engineers.	Engravers.	Expressmen.	FACTORY EMPLOYES	
																																				Males.	Females.
Asbury Park	11,275	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	2	..	4	4	..	..	1	3	..	..	1	..	..	..	..	..	..
Atlantic City	44,861	2	1	..	1	4	12	9	1	..	1	5	2	..	..	..	..	..	..	2	..	7	1	17	8	1	..	2	7	..	..	..	5	3	1	..	..	1
Bayonne	58,202	..	..	..	2	1	1	3	1	6	1	..	..	..	1	..	..	..	..	1	..	7	1	7	..	2	1	1	5	..	..	..	4	..	1	..	..	1
Bloomfield	15,750	..	..	..	1	..	..	..	1	..	..	1	2	..	..	..	1	..	..	..	..	1	..	2	..	..	..	..	1	..	..	..	..	..	..	..	1	1
Bordentown	4,285	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	1	..	1	..	..	..	1
Bridgeton	14,326	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	1	1	6	..	..	..	1	3	1	..	..	1	1	..	..	..	..
Burlington	8,396	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Camden City	96,773	1	..	1	5	..	22	7	9	5	..	6	17	1	6	..	..	1	5	..	2	10	3	36	..	1	..	6	9	..	..	1	2	10	1	..	2	4
Dover	7,691	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..
East Orange	36,210	..	..	..	..	1	1	1	..	..	..	5	1	..	1	..	..	..	..	..	1	8	1	2	..	..	1	1	1	..	..	1	..	1	..	..	..	..
Elizabeth	75,989	2	..	..	4	1	..	3	4	..	2	5	4	..	5	..	1	..	2	..	1	27	1	17	3	..	..	1	11	..	..	..	3	3	..	..	4	..
Englewood	10,324	..	..	..	..	..	..	..	..	..	..	2	..	..	1	..	1	..	..	1	..	1	..	4	1	..	..	..	2	1	1	1	..	1	..	..	..	..
Garfield	11,237	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	..	..	..	3	..	..	..	..	1	..	..	4	1
Gloucester City	9,743	..	..	..	..	..	..	1	..	..	1	1	..	..	..	..	..	1	1	..	..	1	..	1	..	..	..	1	1	..	..	..	2	..	..	..	..	..
Guttenberg	5,864	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	..	..	..	..	..	..	1	1	..	..	..	..
Hackensack	14,640	..	..	..	..	2	3	2	..	..	..	2	..	1	1	..	..	..	..	..	..	3	2	3	1	..	..	..	1	..	..	..	4	1	..	1	..	..
Hammonton	5,239	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Harrison	14,833	..	..	..	..	1	..	1	..	..	..	1	..	..	..	1	..	..	..	..	..	3	..	2	..	..	..	..	3	..	..	..	4	1	..	..	2	1
Hoboken	71,295	6	..	1	2	..	3	14	2	33	2	4	5	..	7	1	2	..	4	..	1	23	3	28	3	1	..	6	25	1	..	1	3	11	1	2	1	1
Irvington	12,816	..	..	..	..	..	..	1	1	..	..	..	..	1	2	1	..	..	..	..	..	1	..	2	1	..	..	..	1	..	..	1	..	..	..	1	..	..
Jersey City	274,795	1	1	1	10	4	14	44	14	33	8	17	19	..	26	..	..	1	8	1	4	105	9	71	9	3	2	3	83	6	1	..	6	27	3	6	4	9
Kearny	19,671	..	..	..	..	..	..	4	..	..	..	1	..	..	..	..	..	..	1	..	..	2	..	7	1	..	..	1	1	..	..	..	4	..	..	..	2	1
Lambertville	4,585	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	3	..	..	..	3	1	..	..	..	1	..	..	..	..	..
Long Branch	13,521	..	..	1	..	1	1	1	4	..	..	2	..	..	1	..	..	..	2	..	..	1	..	5	3	..	..	2	5	1	..	..	2	..	..	..	..	..
Millville	12,564	..	..	..	..	1	..	2	..	1	..	..	..	..	1	..	..	..	..	..	..	1	..	2	..	..	..	..	1	..	..	1	..	1	..	..	..	..
Montclair	22,586	..	..	1	..	3	..	1	1	..	..	1	1	..	..	..	2	..	1	..	1	3	1	4	..	..	2	2	9	..	..	2	..	1	..	..	..	..

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TABLE 3.—SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INHABITANTS IN NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1911—*Continued.*

CITIES.	Farmers.	Firemen.	Fishermen.	Florists, &c.	Foundrymen.	Glassblowers.	Glassworkers.	Grinders, &c.	Grocers.	Hatters.	Hotelkeepers.	Icemen.	Janitors, &c.	Japanners.	Jewelers.	Laundresses.	Laundrymen.	Lawyers.	Leatherworkers.	Lettercarriers.	Linemen.	Linoleumworkers.	Housewives.	Laborers.	Locksmiths.	Machinists.	Managers, &c.	Manufacturers.	Masons.	Merchants.	Milkmen.	Millers.	Miners.
Asbury Park	1	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	16	3	....	1	..	....	1	1	....	....	....
Atlantic City	4	1	2	1	1	..	1	..	12	..	10	..	22	1	..	2	..	1	..	..	..	..	171	35	....	1	2	1	5	24	....	....	3
Bayonne	..	3	1	..	2	..	..	..	4	..	..	1	3	..	..	..	..	1	..	..	1	..	130	80	....	2	4	1	3	4	....	....	....
Bloomfield	4	..	..	..	..	..	..	..	1	1	..	1	..	1	..	..	..	..	..	..	..	..	40	3	....	3	..	1	1	2	....	....	....
Bordentown	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	3	....	1	..	1	..	3	....	....	....
Bridgeton	11	..	1	1	1	5	9	..	2	..	1	..	2	..	..	..	1	..	..	..	1	..	78	13	....	4	..	..	2	4	....	1	....
Burlington	..	..	1	..	4	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	..	..	23	6	....	3	3	..	..	2	....	....	....
Camden City	20	1	..	5	5	..	2	..	3	1	3	2	14	..	..	1	..	2	..	5	..	1	3	388	105	....	9	5	5	9	16	2	1	....
Dover	3	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	30	8	....	..	..	..	..	5	....	....	2
East Orange	..	..	..	1	..	..	..	..	1	6	..	..	2	..	..	..	1	..	1	..	..	..	..	64	5	1	1	4	2	..	4	....	....	....
Elizabeth	5	2	..	..	..	..	..	4	..	..	2	1	5	1	..	1	1	6	..	..	1	..	144	119	....	37	6	4	9	6	....	....	....
Englewood	2	..	..	..	1	..	..	..	3	..	..	..	1	..	..	..	..	..	..	..	..	..	33	7	....	1	1	..	2	1	....	....	....
Garfield	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25	7	....	..	..	..	..	..	....	....	....
Gloucester City	2	1	..	1	..	..	..	..	..	..	1	..	2	..	..	..	..	..	..	..	..	..	43	7	....	..	1	..	..	1	....	....	....
Guttenberg	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	18	4	....	..	..	..	..	..	1	....	....
Hackensack	6	..	..	..	..	..	..	..	1	..	1	..	2	..	..	..	..	1	..	..	..	..	52	13	....	1	2	..	2	4	....	....	....
Hammonton	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	5	....	..	..	1	..	..	1	....	....
Harrison	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	42	24	....	..	2	..	..	1	....	....	....
Hoboken	2	6	..	3	..	..	..	..	1	..	6	4	12	..	4	1	..	2	3	..	1	..	258	82	....	7	6	3	4	14	1	....	....
Irvington	2	..	..	..	..	..	1	..	1	1	..	..	..	..	1	..	..	..	..	..	1	..	64	2	....	3	2	1	..	..	1	....	....
Jersey City	5	17	..	5	10	..	4	..	8	1	5	1	35	..	4	2	2	1	4	1	1	..	917	270	1	38	13	14	18	39	2	....	....
Kearny	..	1	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	38	7	....	9	1	1	..	1	....	....	....
Lambertville	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	1	....	..	1	..	..	1	....	....	....
Long Branch	9	..	1	3	..	..	..	..	3	..	4	..	..	..	1	1	..	..	..	..	..	..	62	15	....	..	..	..	6	6	....	....	....
Millville	4	1	1	..	..	8	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	44	21	....	..	1	1	1	2	....	....	....
Montclair	..	3	..	2	..	..	..	..	..	..	..	..	2	..	..	..	..	1	..	..	..	..	80	11	....	..	3	1	3	6	....	....	....

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TABLE 3.—SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INHABITANTS IN NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1911—*Continued.*

CITIES.	Musicians.	Nurses.	Painters.	Paperhangers.	Photographers.	Physicians.	Plumbers.	Porters, &c.	Potters.	Printers.	Real estate and insurance.	Railroad employes.	Rubberworkers.	Sailors.	Salesmen.	Shipbuilders.	Shoemakers.	Silkworkers.	Stonecutters.	Tailors.	Tanners.	Teachers.	Telegraphers.	Tileworkers.	Tinsmiths.	Trunkmakers.	Undertakers.	Upholsterers.	Waiters.	Watchmakers.	Weavers.	Wheelwrights.	Wireworkers.	All other trades.	All other professions.	All other occupations.
Asbury Park			1				1			1		2																1							1
Atlantic City	1		3	2	1	4		4			7	4		1	10		1			1		1					1		16				1	2	17
Bayonne	2		3				6	1		2		6		3	2	4	2		1	1		1								1		1	2	7
Bloomfield			2	1		1	1	1									1					1	1							2		1		1
Bordentown		1	1									5			1		2			1							1			1				
Bridgeton		2	2				1				2	1			1		3		1														1	
Burlington	1	1			1	1			1						1	1	3	1				1													
Camden City	1	5	10			2	8	3	1	2	1	17		3	13	6	11	1	3	8		1	1		2		1		3	1	1		1	6	2	16
Dover			1			1						4			1			1																1	
East Orange	1		1			2	1			3	4			1	4		1						1		1		1								3
Elizabeth			8		2	2	6	1		1	7	14		1	7	1			1	5		1	1	1		1				1			7	1	7
Englewood	1	1	2			1		2			1				1					1										1			1		3
Garfield			1							2																				2					
Gloucester City			1												1																		2		
Guttenberg			1																	1															1
Hackensack		2	2			2		2			1						1		1			2													3
Hammonton					1						2																								
Harrison												3										1													2
Hoboken	1	2	5	1		2	5	5		6	4	15		8	5	1	6	2	2	2		4	1		2			2	5				2	1	26
Irvington							1					1					2			3	1												1		2
Jersey City	4	2	39		2	3	14	14		14	9	103		13	23	3	6	4	6	12	1	8	4		5		4	2	6	1	3			22	5	47
Kearny			1							2		1			1	1																		4	
Lambertville															1					1													1	1	
Long Branch		1	7	1				1		1		3		1	2					1		1			2			1						1	2
Millville	1	2										1			1		1		1			1										1			1
Montclair		1	3								3			1	2														1				1	1	2

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TABLE 3.—SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INHABITANTS IN NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1911—*Continued.*

CITIES.	Estimated population of cities.	Agents.	Architects.	Artists.	Bakers.	Bankers, &c.	Barbers.	Bartenders, &c.	Blacksmiths.	Boatmen.	Boilermakers.	Bookkeepers.	Brass and ironworkers	Brickmakers.	Butchers.	Buttonmakers.	Chauffeurs.	Chemists.	Cigarmakers.	Civil engineers.	Clergymen.	Clerks.	Constables and policemen.	Contractors and carpenters.	Cooks.	Coopers.	Dentists.	Dressmakers.	Drivers, &c.	Druggists.	Dyers.	Editors & journalists.	Electricians.	Engineers.	Engravers.	Expressmen.	FACTORY EMPLOYES	
																																				Males.	Females.
Morristown	12,579	..	2	..	1	2	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	2	2	4	2	..	..	3	7	..	..	..	1	1	..	..	..	..
Newark	360,305	8	2	1	16	4	11	45	18	3	2	15	46	..	24	14	3	2	11	2	10	72	9	89	20	4	3	21	111	3	1	2	10	16	2	7	38	17
New Brunswick	23,439	..	..	..	..	1	1	..	1	1	..	2	..	1	..	1	..	..	2	..	2	2	1	7	..	..	..	..	2	..	..	..	2	1	..	1	9	6
North Plainfield	6,217	..	..	..	..	..	..	..	1	..	..	2	..	..	..	..	..	..	..	..	1	1	..	2	..	..	..	..	1	..	..	..	..	1	..	..	..	..
Nutley	6,300	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	1	..	..	..	..	..	..	..	..	..	2	..
Orange	30,336	..	..	..	1	..	2	1	3	..	..	1	..	..	1	..	..	..	1	1	..	14	..	9	3	..	..	2	7	..	1	..	1	..	1	..	..	3
Passaic City	58,160	..	..	1	1	1	..	3	..	..	..	3	1	..	3	..	..	..	..	..	1	11	..	7	..	..	1	..	5	..	..	1	1	..	1	1	26	4
Paterson	128,414	3	..	..	5	3	5	18	14	..	2	3	15	1	6	..	..	..	4	..	3	17	6	43	..	..	..	2	36	1	24	3	2	7	..	1	6	7
Perth Amboy	33,366	1	1	..	..	1	..	1	..	3	..	1	1	..	..	..	..	..	1	..	..	4	..	4	1	..	..	1	1	..	..	..	2	..	2	..	..	1
Phillipsburg	14,013	..	..	..	..	1	1	..	2	..	1	..	3	..	..	..	..	..	1	..	..	4	1	4	..	..	..	..	..	..	1	..	..	1	..	..	..	..
Plainfield	20,966	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	2	4	..	7	3	..	..	..	3	..	..	..	1	2	..	..	..	..
Princeton	4,957	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rahway	9,475	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	3	1	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Red Bank	7,625	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	1	2	..	1	..	..	1	..	1	..	..	..	..	..	..	..	..	..
Ridgewood	5,703	..	..	1	..	..	..	..	1	..	..	..	..	..	..	1	..	1	..	..	..	4	..	4	2	..	..	..	..	..	1	..	1	..	..	..	..	..
Roosevelt	5,786	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rutherford	7,410	..	..	1	..	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	..	..	1	..
Salem City	6,648	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Somerville	5,116	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	..	..	..	..	..	1	..	1	..	..	..	1	..	..	..	..
South Amboy	7,157	..	..	..	..	..	..	1	1	1	..	..	1	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..	..	..	..	..	1	..	..	..	..
South Orange	6,230	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Summit	7,631	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Town of Union	21,827	..	..	..	1	..	..	4	1	1	..	4	..	..	..	..	..	..	1	..	..	4	1	6	1	..	..	..	3	..	..	1	2	..	..	..	..	1
Trenton	99,342	1	..	..	2	..	5	5	7	1	..	6	9	1	3	..	2	..	2	2	5	17	2	19	2	2	..	4	15	..	..	2	2	8	1	1	2	3
Vineland	5,420	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	1	..	1	..	..	..	1	..	..	..	1
Westfield	6,651	..	..	..	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	..	..	1	1	..	..	..	..	..
West Hoboken	36,667	..	1	1	1	..	1	2	1	1	..	2	1	..	2	..	..	..	1	..	2	8	1	9	..	..	..	1	3	..	..	1	..	2	1	..	2	1
West New York	14,833	..	1	..	..	1	1	2	..	..	..	..	..	..	4	..	1	..	..	..	..	2	..	5	..	..	..	..	..	1	..	..	..	..	..	..	..	..
West Orange	11,602	..	..	..	..	2	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	3	..	2	1	..	..	2	1	1	..	..	1	..	..	..	..	..

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TABLE 3.—SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INHABITANTS IN NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1911—*Continued.*

CITIES.	Farmers.	Firemen.	Fishermen.	Florists, &c.	Foundrymen.	Glassblowers.	Glassworkers.	Grinders, &c.	Grocers.	Hatters.	Hotelkeepers.	Icemen.	Janitors, &c.	Japanners.	Jewelers.	Laundresses.	Laundrymen.	Lawyers.	Leatherworkers.	Lettercarriers.	Linemen.	Linoleumworkers.	Housewives.	Laborers.	Locksmiths.	Machinists.	Managers, &c.	Manufacturers.	Masons.	Merchants.	Milkmen.	Millers.	Miners.
Morristown	4	..	..	6	..	..	..	..	1	..	1	1	1	..	..	2	..	1	..	..	..	..	61	22	....	..	1	..	3	1	..	..	1
Newark	13	20	1	6	10	..	1	16	14	34	5	4	23	9	45	9	2	5	46	2	4	2	1208	350	....	32	17	19	41	41	3	..	1
New Brunswick	2	1	..	1	1	..	..	..	5	..	6	..	4	..	1	..	..	..	1	..	..	..	67	34	....	3	..	3	..	4	..	..	..
North Plainfield	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	5	1	....	1	..	..	..	..	..	..	..
Nutley	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	8	2	....	..	1	..	..	..	..	..	..
Orange	..	..	..	6	..	..	1	..	2	18	1	1	..	..	..	2	..	..	..	1	1	..	123	29	....	2	3	1	5	4	..	..	..
Passaic City	2	1	..	4	..	..	..	..	1	1	2	1	3	..	..	..	1	..	..	..	..	..	106	41	....	2	1	4	1	6	..	..	..
Paterson	14	12	..	1	5	..	..	..	4	1	2	1	14	..	..	1	1	1	1	1	..	..	422	78	....	23	3	5	13	21	3	..	..
Perth Amboy	..	4	1	..	1	..	1	..	1	..	2	..	1	..	..	..	..	..	..	..	..	..	61	48	....	2	1	..	3	2	..	..	..
Phillipsburg	3	1	..	..	3	..	..	..	..	..	..	..	2	..	..	..	..	1	..	..	..	..	41	12	....	1	1	..	..	2	..	2	..
Plainfield	4	..	..	1	..	..	..	..	1	..	1	1	1	..	..	..	1	..	..	..	2	..	26	6	....	4	3	1	3	2	..	..	..
Princeton	4	..	..	..	..	..	..	..	..	..	..	..	4	..	..	1	..	..	..	..	..	..	22	3	....	..	..	..	..	1	..	..	..
Rahway	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	32	4	....	..	..	1	1	2	..	..	..
Red Bank	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2	..	..	..	..	25	7	....	..	..	..	1	2	..	..	..
Ridgewood	2	..	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	2	1	..	..	..	42	9	....	1	1	2	2	2	..	..	..
Roosevelt	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	5	....	1	..	..	..	..	..	..	..
Rutherford	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	2	....	..	1	..	..	..	..	..	..
Salem City	6	..	..	..	..	2	2	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	25	11	....	1	..	1	..	2	..	..	..
Somerville	6	..	..	..	2	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	33	5	....	..	..	1	..	4	..	..	1
South Amboy	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	23	7	....	2	..	..	..	..	..	..	..
South Orange	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	1	....	..	..	1	1	1	..	..	..
Summit	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	..	..	..	17	5	....	..	..	1	..	6	..	..	..
Town of Union	..	..	..	3	..	1	1	..	..	..	2	..	..	..	1	..	..	..	..	..	..	..	52	6	....	1	3	1	..	3	..	..	..
Trenton	29	6	..	4	8	1	1	..	6	1	5	1	2	..	1	..	1	3	3	..	1	..	369	114	....	7	6	1	8	13	..	1	..
Vineland	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23	7	....	..	1	..	1	1	..	..	..
Westfield	3	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	4	3	....	..	1	..	..	2	..	..	..
West Hoboken	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	107	1	....	6	1	..	2	4	..	..	..
West New York	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	55	3	....	..	2	1	2	1	..	..	..
West Orange	4	..	..	3	..	..	..	..	..	7	..	..	1	..	2	..	..	..	..	..	..	..	21	2	....	..	..	..	..	1	..	..	..

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TABLE 3.—SHOWING OCCUPATIONS OF DECEDENTS IN CITIES OF OVER 5,000 INHABITANTS IN NEW JERSEY FOR THE YEAR ENDING DECEMBER 31, 1911.—*Continued.*

CITIES.	Musicians.	Nurses.	Painters.	Paperhangers.	Photographers.	Physicians.	Plumbers.	Porters, &c.	Potters.	Printers.	Real estate and insurance.	Railroad employes.	Rubberworkers.	Sailors.	Salesmen.	Shipbuilders.	Shoemakers.	Silkworkers.	Stonecutters.	Tailors.	Tanners.	Teachers.	Telegraphers.	Tilleworkers.	Tinsmiths.	Trunkmakers.	Undertakers.	Upholsterers.	Waiters.	Watchmakers.	Weavers.	Wheelwrights.	Wireworkers.	All other trades.	All other professions.	All other occupations.
Morristown	8	6	2		1	2	2			10	15	30		6	48	4	32		7	40	15	6	1		2	6	3	3	15	1	5	2	3	48	7	4
Newark		46	1	1	1	10	24	14			2	1	4		3					2		2		1	1			2	2		1	1		27		
New Brunswick		3	1		1	1		2																4									1		
North Plainfield		1																																	
Nutley		1								1			1																						
Orange	1	3	4		1	2	1	2		1	4	3			1		1			3		3											3	1	3
Passaic City		4	2		2	1	2			1	3	1		1	5		1	1		2		2		5						6				1
Paterson	4	3	19		2	2	5	4	1	2	5	20	1	4	14		9	80	2	5		4			3			2		68			11	3	18
Perth Amboy			2			1						5		1	2			2												1				1	1
Phillipsburg												6								2										2				1	1
Plainfield		1	2					1			3	4		1	1	1	1										1		2					2	1
Princeton																																			
Rahway			2							1	1	1			1		1				1	1													1	
Red Bank		1	2		1						1	1		1	1				2			2		1					1					2	
Ridgewood								1		2		1			1																		1		
Roosevelt					1														2																
Rutherford																			1		1														
Salem City		2	2							1	2	1					1					1					1				1		1	7	
Somerville		2	2				1					1																							
South Amboy			1									6																							
South Orange		1	1			1	1																												
Summit		1	2			1	3	1			2	1		1	1		3			1													2		
Town of Union		2	2		1	2	3			3	1	31	19	2	7		5			5		9			3			4			1	2	7		13
Trenton		2	1			2				58																									
Vineland			3								3											1							1							
Westfield																																			
West Hoboken			3			2		1			2	3		1	1			8	1			1			2			2		2			2		
West New York		1	1	1							1			1				1													1		1		
West Orange	1														2																				

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TABLE 4.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY COUNTIES, EXCLUSIVE OF CITIES OF OVER 5,000 INHABITANTS, FOR THE YEAR ENDING DECEMBER 31, 1911.

COUNTIES.	Estimated Population of counties, exclusive of cities.	Agents.	Architects.	Artists.	Bakers.	Bankers, &c.	Barbers.	Bartenders, &c.	Blacksmiths.	Boatmen.	Bollermakers.	Bookkeepers.	Brass and ironworkers	Brickmakers.	Butchers.	Buttonmakers.	Chauffeurs.	Chemists.	Cigarmakers.	Civil engineers.	Clergymen.	Clerks.	Constables and policemen.	Contractors and carpenters.	Cooks.	Coopers.	Dentists.	Dressmakers.	Drivers, &c.	Druggists.	Dyers.	Editors & journalists.	Electricians.	Engineers.	Engravers.
Atlantic	21,200	..	..	..	1	..	1	..	1	6	..	..	1	..	1	..	..	..	..	..	1	2	..	9	3	..	..	..	3	..	..	..	1	..
Bergen	96,288	1	..	1	2	4	4	3	2	1	1	6	..	..	4	1	..	..	2	1	1	10	1	31	1	..	1	..	9	2	..	1	3	2	1
Burlington	54,789	3	..	..	2	..	..	1	3	..	1	..	..	..	1	..	..	..	..	..	..	6	..	12	1	1	1	3	2	1	1	..	..	4	2
Camden	39,608	..	..	..	..	2	..	3	3	1	..	..	..	..	1	..	..	..	1	1	2	9	..	14	..	..	..	1	4	..	..	..	2	4	..
Cape May	20,216	..	..	1	..	..	..	2	..	3	..	1	..	..	..	..	..	..	..	..	..	2	..	7	..	..	..	..	2	1	..	..	..	2	..
Cumberland	23,452	..	..	..	1	..	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	3	..	..	..	..	..	..	..	..	..	..	2
Essex	81,343	..	..	..	3	2	2	1	..	..	..	4	1	..	3	..	2	1	1	..	2	9	1	5	1	1	..	2	2	..	..	..	3	1
Gloucester	37,946	1	..	..	1	..	..	1	2	..	1	1	..	..	2	..	..	..	1	1	1	3	..	18	..	..	..	3	2	..	..	..	3	..
Hudson	86,714	2	..	..	3	..	1	5	6	4	3	4	6	..	3	..	1	..	3	..	..	17	1	16	2	2	1	5	20	2	..	..	2	6	..
Hunterdon	29,046	..	..	..	..	..	2	..	3	..	..	4	1	..	2	..	1	1	..	..	2	2	..	8	..	..	..	2	1	..	..	1	..	1	..
Mercer	24,386	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	4	3	..	..	..	3	..	..	..	..	1	..
Middlesex	48,156	..	..	..	..	..	..	..	6	1	..	2	..	4	..	..	..	..	..	..	..	5	..	9	..	..	1	..	..	..	..	..	..	..	..
Monmouth	63,676	..	1	..	2	1	2	1	2	7	..	2	..	..	1	..	2	..	..	1	3	6	1	20	4	..	3	..	9	1	..	..	2	3	..
Morris	55,788	..	..	..	..	1	..	2	6	..	..	4	3	..	1	2	..	1	..	3	..	12	1	23	4	1	1	6	4	..	..	..	..	6	..
Ocean	21,406	..	..	..	..	..	1	..	1	2	..	..	..	..	..	..	..	..	..	..	..	4	..	8	..	..	..	1	1	..	..	..	..	1	..
Passaic	37,337	1	..	..	1	1	..	..	3	..	..	4	..	..	1	1	..	..	2	..	..	2	..	3	..	..	..	..	1	..	..	1	1	2	..
Salem	20,493	..	..	..	..	..	..	..	4	1	..	..	..	..	..	..	..	..	..	..	..	1	..	3	1	..	..	..	2	..	..	..	..	1	..
Somerset	27,997	1	..	..	..	1	..	1	..	..	1	2	..	..	..	..	..	..	..	1	1	2	..	4	1	..	..	..	1	1	..	1	..	1	..
Sussex	27,472	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2	6	..	6	..	..	..	..	2	..	..	..	1	1	..
Union	24,082	1	..	..	..	2	..	..	1	..	..	..	1	..	1	..	..	..	..	..	1	5	1	6	..	..	..	1	..	..	..	..	..	1	..
Warren	29,781	2	..	..	1	..	1	..	4	..	..	1	1	..	..	..	..	..	..	..	..	4	..	9	..	..	..	2	3	1	..	1	..	2	..

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TABLE 4.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY COUNTIES, EXCLUSIVE OF CITIES OF OVER 5,000 INHABITANTS, FOR THE YEAR ENDING DECEMBER 31, 1911.—*Continued.*

COUNTIES.	Expressmen.	FACTORY EMPLOYES.		Farmers.	Firemen.	Fishermen.	Florists, &c.	Foundrymen.	Glassblowers.	Glassworkers.	Grinders, &c.	Grocers.	Hatters.	Hotelkeepers.	Icemen.	Janitors, &c.	Japanners.	Jewelers.	Laundresses.	Laundrymen.	Lawyers.	Leatherworkers.	Lettercarriers.	Linemen.	Linoleumworkers.	Housewives.	Laborers.	Locksmiths.	Machinists.	Managers, &c.	Manufacturers.	Masons.	Merchants.	Milkmen.
		Males.	Females.																														
Atlantic	..	.....	.....	29	1	....	1	..	..	1	..	..	..	1	1	1	..	..	1	..	1	1	..	..	89	10	..	1	..	..	2	6	..
Bergen	..	6	.....	27	2	....	9	..	..	..	1	1	1	4	..	4	..	4	..	1	1	1	2	2	..	180	33	..	8	4	1	4	7	..
Burlington	..	4	3	81	....	1	3	8	2	..	..	..	3	..	2	..	4	..	1	..	..	..	2	..	2	..	188	48	1	8	3	2	4	10	..
Camden	..	.....	1	28	....	....	1	..	1	1	1	1	..	..	..	2	..	1	..	..	..	..	..	1	..	100	31	..	5	2	2	4	11	..
Cape May	..	.....	2	8	....	1	2	..	..	1	..	..	..	2	..	..	..	..	..	..	1	..	2	..	..	58	15	..	1	..	1	1	8	..
Cumberland	1	.....	.....	69	....	14	2	..	2	3	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	90	16	..	3	..	..	1	3	..
Essex	..	1	3	14	1	....	2	..	..	..	1	..	6	..	..	5	..	3	..	..	2	2	..	..	..	104	18	1	2	..	5	2	8	..
Gloucester	..	.....	.....	51	....	....	2	1	5	6	..	1	..	1	..	2	..	..	1	..	1	1	..	..	..	143	30	..	1	1	1	4	7	..
Hudson	4	2	1	3	1	....	3	5	..	..	..	..	1	2	1	4	..	2	..	..	2	..	..	2	..	156	117	..	7	3	3	5	9	..
Hunterdon	..	.....	.....	77	....	....	..	1	..	2	2	..	..	2	..	..	..	..	..	..	1	1	..	..	..	156	35	..	2	1	..	2	2	..
Mercer	..	.....	.....	42	1	....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	75	14	..	1	1	1	..	1	1
Middlesex	..	2	1	36	....	....	1	1	..	..	..	1	..	1	1	1	..	..	..	..	3	..	..	..	..	97	64	..	3	5	3	2	7	..
Monmouth	..	.....	2	74	1	2	5	1	..	..	..	3	..	2	5	5	..	1	1	..	4	..	4	2	..	107	52	..	4	..	2	8	14	..
Morris	..	1	4	51	4	....	1	3	..	..	1	..	1	3	1	1	..	3	1	..	4	1	..	..	..	210	54	..	5	2	1	5	6	1
Ocean	..	.....	.....	21	....	1	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	..	..	..	..	61	13	..	..	1	1	..	6	1
Passaic	..	3	1	17	2	....	1	..	..	..	..	..	..	2	1	1	..	..	..	..	..	..	..	..	..	76	22	..	2	..	..	1	3	1
Salem	..	.....	.....	40	....	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	78	10	..	..	..	1	1	2	..
Somerset	..	2	.....	47	....	....	1	..	..	..	..	..	..	..	1	..	..	..	..	..	3	..	1	..	..	72	21	..	2	1	1	1	4	..
Sussex	..	2	.....	34	1	....	3	..	..	..	..	..	1	1	..	1	..	2	..	..	1	..	..	..	..	103	33	..	2	1	1	5	4	..
Union	..	.....	.....	10	....	....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	37	5	..	1	2	3	1	..	1
Warren	..	1	.....	42	1	....	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	107	34	..	3	2	..	..	5	..

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TABLE 4.—SHOWING OCCUPATIONS OF DECEDENTS IN NEW JERSEY, BY COUNTIES, EXCLUSIVE OF CITIES OF OVER 5,000 INHABITANTS, FOR THE YEAR ENDING DECEMBER 31, 1911.—*Continued.*

COUNTIES.	Millers.	Miners.	Musicians.	Nurses.	Painters.	Paperhangers.	Photographers.	Physicians.	Plumbers.	Porters, &c.	Potters.	Printers.	Railroad employes.	Real estate and insurance.	Rubberworkers.	Sailors.	Salesmen.	Shipbuilders.	Shoemakers.	Silkworkers.	Stonecutters.	Tailors.	Tanners.	Teachers.	Telegraphers.	Tileworkers.	Tinsmiths.	Trunkmakers.	Undertakers.	Upholsterers.	Waiters.	Watchmakers.	Weavers.	Wheelwrights.	Wireworkers.	All other trades.	All other professions.	All other occupations.
Atlantic	..	..	1	..	..	1	..	..	1	..	..	..	..	1	..	4	..	..	2	..	..	2	..	2	..	..	1	..	..	..	..	..	..	..	2	..	2
Bergen	..	..	..	..	4	..	..	..	1	..	..	..	11	4	..	2	6	1	4	5	4	1	..	2	2	..	1	..	..	..	2	2	2	..	..	3	2
Burlington	1	..	1	2	5	..	..	2	..	..	..	..	2	2	..	2	5	..	8	..	..	2	..	7	2	..	2	..	..	..	1	5	..	..	2	1	6
Camden	..	..	..	2	3	1	..	1	1	..	..	..	2	3	1	2	3	..	4	2	..	2	..	7	..	..	1	..	3	..	..	..	..	..	1	3	6
Cape May	1	1	..	..	2	..	..	3	1	..	..	1	1	1	..	2	1	..	1	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	4
Cumberland	1	..	..	1	1	..	..	1	..	..	1	1	1	..	..	4	2	2	1	..	1	1	..	5	..	..	1	..	..	..	..	..	..	..	1	..	3
Essex	..	..	..	2	3	..	..	..	3	1	..	..	..	..	3	1	3	3	..	1	..	1	..	4	2	..	..	2	..	1	..	..	..	..	..	3	4
Gloucester	..	..	..	..	2	..	..	1	..	1	..	4	1	1	..	..	3	..	1	..	..	2	..	4	2	..	..	1	..	..	..	1	..	..	..	3	3
Hudson	..	..	2	..	7	..	2	1	5	4	..	4	14	..	3	1	2	..	5	3	3	1	1	..	..	..	2	..	..	..	2	..	3	1	..	6	12
Hunterdon	1	..	..	1	2	..	..	5	..	..	..	..	2	..	..	..	..	..	3	..	1	..	..	2	..	..	..	..	..	..	1	..	1	..	..	1	1
Mercer	1	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	1
Middlesex	..	1	..	..	4	1	..	..	..	..	..	..	8	1	1	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1	3
Monmouth	1	..	..	1	9	..	..	1	..	1	..	2	4	6	..	1	4	1	2	..	1	..	..	1	..	..	1	..	..	1	..	..	1	..	1	2	10
Morris	1	26	1	6	6	..	..	2	3	2	..	4	8	1	1	..	..	..	4	3	3	1	..	9	..	..	1	..	1	..	..	1	2	..	2	2	6
Ocean	..	..	..	1	..	..	..	1	..	..	..	1	..	1	..	5	2	1	2	..	1	1	..	1	..	..	..	..	1	..	..	5	1	..	1	2	5
Passaic	..	5	..	..	2	..	..	..	1	..	..	1	1	..	..	..	3	..	1	10	..	1	..	..	..	..	..	..	1	..	..	1	..	4	..	3	7
Salem	1	..	..	2	..	..	..	..	..	..	..	..	1	..	..	1	2	..	1	..	..	..	..	..	..	..	1	..	..	..	1	..	2	..	..	2	2
Somerset	..	..	..	1	2	..	..	..	..	..	..	1	2	..	..	..	1	..	..	..	..	..	..	2	..	..	1	..	..	..	..	..	2	1	..	..	3
Sussex	2	9	..	1	1	..	..	1	..	..	..	..	1	..	..	..	1	..	3	1	..	1	..	..	..	..	1	..	..	..	..	..	2	..	..	1	2
Union	..	..	..	..	2	..	..	..	1	2	..	..	3	2	1	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	2	..	4
Warren	..	6	..	..	..	..	1	..	1	..	..	..	3	3	..	1	1	..	..	1	..	1	..	6	..	..	..	..	..	..	..	..	..	1	1	..	5

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TABLE 5.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEDENTS IN DECEMBER

		Agents.	Architects.	Artists.	Bakers.	Bankers and brokers.	Barbers.	Bartenders, brewers & saloonkeepers	Blacksmiths.	Boatmen.	Bollermakers.	Bookkeepers.	Brass and ironworkers.	Brickmakers.	Butchers.	Buttonmakers.
Consumption.	10 to 15	..	..	..	..	..	..	1	..	..	1	..	..	..	2	..
	15 to 20	..	1	..	..	2	1	1	..	1	1	3	..	..	2	..
	20 to 30	..	..	..	1	1	5	7	3	..	3	13	7	..	6	3
	30 to 40	..	..	..	1	1	6	20	6	6	3	12	14	..	12	4
	40 to 50	..	..	2	2	3	1	7	3	3	2	6	6	..	3	1
	50 to 60	..	..	1	3	1	1	4	3	2	..	2	6	..	1	1
	60 to 70	..	..	..	1	1	..	..	1	1	..	1	..	..	..	..
	70 to 80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	80 to 90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Over 90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals		..	1	3	8	9	14	39	21	13	8	37	35	..	28	9
Cancer.	10 to 15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	15 to 20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	20 to 30	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
	30 to 40	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
	40 to 50	..	..	..	..	..	1	4	..	..	..	..	1	..	1	..
	50 to 60	..	..	..	1	1	4	..	2	..	1	3	3	..	4	1
	60 to 70	1	..	..	..	3	..	1	2	..	..	2	1	1	2	..
	70 to 80	..	..	..	..	..	..	1	1	..	..	..	1	..	..	..
	80 to 90	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
	Over 90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals		1	..	..	1	4	5	6	6	1	1	6	7	1	7	1
Suicide.	10 to 15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	15 to 20	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
	20 to 30	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..
	30 to 40	..	..	..	..	..	..	3	1	..	..	..	..	..	1	..
	40 to 50	1	..	..	1	1	..	1	1	2	1	1	1	..	..	..
	50 to 60	1	..	..	..	..	..	2	..	..	..	2	1	..	1	..
	60 to 70	..	..	..	..	..	..	2	..	..	..	1	..	..	..	..
	70 to 80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	80 to 90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Over 90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals		2	..	1	2	1	..	8	2	3	1	4	2	..	2	1
Diseases of the nervous system and of the organs of sense.	10 to 15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	15 to 20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	20 to 30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	30 to 40	1	..	..	..	1	..	1	1	1	..	..	..	..	1	..
	40 to 50	1	..	..	3	2	2	6	2	1	..	3	4	..	1	..
	50 to 60	2	1	..	2	2	1	3	4	1	1	3	4	..	3	1
	60 to 70	1	..	1	3	1	5	3	3	4	..	7	4	1	5	..
	70 to 80	..	1	1	1	1	..	3	2	2	..	2	..	..	1	..
	80 to 90	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
	Over 90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals		5	2	2	9	7	8	16	12	9	1	15	12	1	15	3
Diseases of the circulatory system.	10 to 15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	15 to 20	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
	20 to 30	..	..	..	1	1	2	1	..	2	..	..	..	..	..	..
	30 to 40	..	1	1	..	..	..	2	1	1	1	..	6	..	4	..
	40 to 50	1	1	1	4	2	2	6	3	5	3	4	4	..	1	..
	50 to 60	..	1	..	2	1	2	5	5	1	3	3	4	..	2	..
	60 to 70	1	1	3	3	3	3	4	7	7	2	3	2	..	5	..
	70 to 80	..	1	..	2	1	1	1	11	4	..	3	1	..	7	..
	80 to 90	..	..	1	..	1	..	..	1	1	..	..	1	..	..	..
	Over 90	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Totals		2	5	6	12	9	10	19	29	21	9	13	18	..	20	..

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NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 31, 1911.

Chauffeurs.	Chemists.	Cigarmakers.	Civil engineers.	Clergymen.	Clerks.	Constables and policemen.	Contractors, Carpenters & builders.	Cooks.	Coopers.	Dentists.	Dressmakers and Seamstresses.	Drivers, hostlers and teamsters.	Druggists.	Dyers.	Editors & journalists.	Electricians.	Engineers.	Engravers.	Expressmen.	FACTORY EMPLOYES	
																				Males.	Females.
							1					2				1		1		5	9
					20																
7	2	7	2		65	1	11	4		1	6	33		3	1	10	5		4	16	10
1	1	23		1	40	2	18	3		1	5	53		1		6	4	1	2	7	3
1		23		1	19	3	22	3	1		3	22	1	1	1	2	6		3	4	
			1	1	5	1	16	1	1			10					1			4	1
				2	7		6				4	4					1				
					2		1												1		
					1																
9	3	13	3	5	159	5	81	11	2	2	18	124	1	5	2	19	17	2	10	35	25
					1		1				1	1									
		1			3		1					1									
		1		1	5	1	6	2				4		2		1	2				2
		2		2	11	4	13			1	5	7			1		6			1	1
		1	1	1	10	1	16	1		1	4	6		1		1	2	2		1	
				1	4		7	1		1	2	1					2			1	
							1												1		
		5	1	5	34	6	45	4		2	12	19		3	1	2	12	3		3	3
					1						1										
					3	2	3					2				1					1
		1			2	1	1	3				2							1	1	
					2		2					2	1							1	
					3	1	4				1			1			1			1	
					1		2	1												1	
							1			1											
		1			12	4	13	4		1	2	6	1	1		1	1		1	4	1
					4		1					1									
		1			4		2					3					1			4	
	2	1			6	2	4	3			1	5	1			2	1			2	
	1		2		12	2	11	3	1	1	4	6	1		1	2	2			1	1
		1		6	13	2	24	4			6	5	1	2	1		3			3	2
		1	1	5	8	2	22	1	1	1	1	5	1	1	1		3	1		1	
				1			9	1			1			1			1				
	3	4	3	12	51	9	81	12	2	2	15	29	6	4	3	6	13	2		11	3
1					6							2				1				1	1
1			2		11		3				1	7				1				3	4
		1			6	1	5	1			1	8			1	2	4			2	
		3			6	2	14	2				9			1		1			2	1
		3		2	9	2	14	6	1			14	1	3	5		4		4	4	3
	1	6	1	2	5	4	25	2		1	1	10		2	1	2	8	1	1	5	
		1		1	3	3	35	1	1	2	1	6					6	2	1		
				1	4	2	18	1	2			2									
2	1	14	3	6	50	14	114	13	4	3	4	58	1	5	8	6	23	3	6	17	9

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TABLE 5.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEDENTS IN DECEMBER

		Farmers.	Firemen.	Fishermen.	Florists and Gardeners.	Foundrymen and Moulders.	Glassblowers.	Glassworkers.	Grinders and polishers.	Grocers.	Hatters.	Hotelkeepers, Restaurateurs and Stewards.	Housekeepers and housewives.	Icemen.
Consumption.	10 to 15	....	..	..	....	...	..	..	....	...	...	....	1	..
	15 to 20	....	..	..	....	1	1	2	....	...	...	....	23	..
	20 to 30	11	3	..	3	2	1	6	1	...	6	1	137	1
	30 to 40	12	4	..	1	7	3	4	3	2	6	1	335	1
	40 to 50	10	3	2	1	2	2	...	3	2	10	4	183	2
	50 to 60	14	4	..	2	....	...	...	2	...	3	22	93	..
	60 to 70	8	..	..	1	....	2	...	....	2	...	22	49	..
	70 to 80	3	..	..	3	....	...	...	....	...	....	....	22	..
	80 to 90	1	..	..	....	....	...	...	....	...	....	....	5	..
	Over 90	....	..	..	....	....	...	...	....	...	....	....	1	..
Totals		64	14	2	11	12	9	12	9	6	25	10	887	4
Cancer.	10 to 15	....	..	..	....	....	...	...	....	...	....	....	....	..
	15 to 20	....	..	..	....	....	...	...	....	...	....	....	1	..
	20 to 30	2	..	..	....	....	...	...	....	...	....	....	13	..
	30 to 40	....	..	..	....	....	...	...	....	...	1	....	74	..
	40 to 50	4	3	..	....	....	...	...	....	1	1	....	182	1
	50 to 60	13	3	1	....	2	1	....	....	....	....	3	111	1
	60 to 70	21	..	1	3	....	2	...	1	1	1	3	209	..
	70 to 80	10	..	..	3	....	...	1	....	1	...	1	110	..
	80 to 90	6	..	..	1	1	....	....	....	....	....	....	23	..
	Over 90	....	..	..	....	....	...	...	....	....	....	....	....	..
Totals		65	6	2	7	3	3	1	1	3	3	7	723	2
Suicide.	10 to 15	....	..	..	....	....	...	...	....	...	....	....	....	..
	15 to 20	3	..	..	....	....	...	...	....	...	....	1	3	..
	20 to 30	....	..	..	....	....	1	...	....	...	....	....	13	..
	30 to 40	2	..	..	3	....	...	...	1	1	....	....	13	..
	40 to 50	1	..	..	....	....	...	...	....	....	....	....	10	..
	50 to 60	5	1	..	1	....	...	1	....	....	....	....	8	..
	60 to 70	4	..	..	....	1	...	...	....	....	....	....	7	..
	70 to 80	2	..	..	....	....	...	...	....	....	....	....	2	..
	80 to 90	....	..	..	....	....	...	...	....	....	....	....	....	..
	Over 90	....	..	..	....	....	...	...	....	....	....	....	....	..
Totals		17	1	..	4	1	1	1	1	1	...	1	56	..
Diseases of the nervous system and of the organs of sense.	10 to 15	....	..	..	....	....	...	...	....	...	....	....	2	..
	15 to 20	....	..	..	....	....	...	...	....	...	....	....	2	..
	20 to 30	....	2	..	....	....	...	...	....	...	1	....	27	1
	30 to 40	6	..	..	....	2	...	...	1	....	2	....	49	1
	40 to 50	7	..	2	1	2	...	...	1	1	3	4	5	..
	50 to 60	13	..	..	1	1	..	2	2	2	3	3	213	..
	60 to 70	48	3	1	5	3	2	...	1	3	1	1	209	1
	70 to 80	71	..	..	5	1	1	....	....	3	1	1	275	..
	80 to 90	33	..	..	3	....	...	....	....	2	....	....	116	1
	Over 90	6	..	..	....	....	...	....	....	....	....	....	8	..
Totals		184	5	3	15	9	3	2	5	11	11	9	899	4
Diseases of the circulatory system.	10 to 15	....	..	..	....	....	...	...	....	...	....	....	....	..
	15 to 20	1	..	..	....	....	...	...	....	...	....	....	4	..
	20 to 30	....	1	..	2	....	...	...	....	...	1	....	58	..
	30 to 40	7	1	..	....	1	1	....	....	...	1	1	111	3
	40 to 50	6	3	2	4	1	..	1	....	...	1	2	155	..
	50 to 60	22	..	2	2	3	1	2	....	...	3	4	233	..
	60 to 70	47	7	2	9	1	1	1	1	5	4	7	276	..
	70 to 80	63	..	1	6	5	1	1	....	1	4	1	264	1
	80 to 90	33	..	..	3	1	..	....	....	...	1	....	115	..
	Over 90	8	..	..	....	....	...	....	....	....	....	....	....	..
Totals		188	12	7	26	12	4	5	1	15	15	18	1243	4

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NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 31, 1911.

Janitors and watchmen.	Japanners.	Jewelers.	Laborers.	Laundresses.	Laundrymen.	Lawyers.	Leatherworkers.	Lettercarriers.	Linemen.	Linoleumworkers.	Lockamiths.	Machinists.	Managers and superintendents.	Manufacturers.	Masons.	Merchants.	Milkmen.	Millers.	Miners.	Musicians.
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	11	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	1	32	2	....	....	1	....	1	....	....	4	1	....	2	1	....	....	1	1
1	1	....	48	....	....	....	1	....	1	....	....	5	3	1	3	3	....	....	....	2
....	1	1	41	....	....	2	....	....	....	....	....	4	2	4	1	3	....	....	....	....
4	....	2	80	....	....	2	1	....	....	....	....	3	....	1	3	10	....	....	....	....
3	....	....	21	....	....	....	2	1	....	....	....	....	1	1	....	4	....	....	2	....
2	....	....	15	....	....	1	....	....	....	....	....	....	....	....	4	5	....	1	1	1
1	....	....	7	....	....	....	1	....	....	....	....	1	....	....	....	3	....	1	....	....
....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
11	2	4	202	4	....	5	5	1	2	....	....	17	7	7	13	29	....	2	4	4

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TABLE 5.—SHOWING AGES AT DEATH AND OCCUPATIONS OF DECEDENTS IN DECEMBER

	Nurses.	Painters.	Paperhangers.	Photographers.	Physicians.	Plumbers.	Porters.	Potters.	Printers.	Railroad employes.	Real estate and insurance.	Rubberworkers.	Sailors.	Salesmen.
All other diseases and causes of death. 10 to 15														
15 to 20								1	1	1			1	
20 to 30	2	3	1		1	2	1	3	1	6		1	1	5
30 to 40	2	6			1	1	1	2	2	4	3		2	5
40 to 50	1	2			1	1	1			2	2		2	7
50 to 60		5				2	1	1			2	1		1
60 to 70		5			1	1		1	1	2	1			3
70 to 80		1		1	1						1		4	2
80 to 90	1				1	1				1				
Over 90		1			1								1	
Totals	6	23	1	1	7	8	4	8	5	16	10	2	11	23

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NEW JERSEY FROM CERTAIN SELECTED DISEASES FOR THE YEAR ENDING 31, 1911.

Shipbuilders.	Shoemakers.	Silkworkers and silkweavers.	Stonecutters.	Tailors.	Tanners.	Teachers.	Telegraphers.	Tileworkers.	Tinsmiths.	Trunkmakers.	Undertakers.	Upholsterers.	Waiters.	Watchmakers.	Weavers.	Wheelwrights.	Wireworkers.	All other occupations.	All other professions.	All other trades.
		1		1											1			1		
		2	2											2						
		1	1	1		2			1		2				1	1	1	1	1	
				1		2		1	1					1				1		
1		2			1		1				1				1	1		1	2	1
1		2	1	1	4										2			1	1	
		1	3		2	1	1			1								1		2
1		3														1		1		
		1			1									1				1		
3	15	8	4	9	3	6	1	...	2	1	8	...	7	2	11	3	1	24	5	13

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TABLE 6.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ASBURY PARK.	AGE PERIODS.												
	Under one month.	Under 1 yr "not including under 1 mo"	One to five.	Five to ten.	Ten to fifteen.	Fifteen to twenty.	Twenty to twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty.	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1	....	....	1	..	..	..	..	..	..	1	..	..
Malaria 4	....	....	1	..	..	..	..	..	..	..	..	..
Scarlet Fever 7	....	....	1	..	..	..	1	..	..	..	..	..
Diphtheria and Croup 9	....	....	..	1	..	..	..	..	..	..	..	..
Including Croup 9A	....	....	1	..	..	..	..	..	..	..	..	..
Dysentery 14	....	....	..	..	..	..	..	..	..	..	..	..
Tuberculosis of the lungs 28	....	....	1	1	..	3	1	1	1	3	1	1
Syphilis 37	....	....	..	..	..	..	..	..	..	..	..	..
Cancer and other malignant tumors of the stomach, liver 40	....	....	..	..	..	..	..	..	..	..	1	..
Cancer and other malignant tumors of the peritonæum, intestines, rectum 41	....	....	..	..	..	..	..	..	..	..	..	..
Cancer and other malignant tumors of the female genital organs 42	....	....	..	..	..	..	..	..	..	..	..	..
Cancer and other malignant tumors of the breast 43	....	....	..	..	..	..	..	..	..	..	..	..
Acute Articular Rheumatism 47	....	....	..	..	..	..	..	..	1	..	..	..
Diabetes 50	....	....	..	..	..	..	..	..	..	..	..	..
Alcoholism (acute or chronic) 56	....	....	..	..	..	..	..	..	..	1	..	..
Other diseases of the spinal cord 63	....	1	..	..	..	..	..	..	..	..	..	..
Cerebral hæmorrhage, apoplexy 64	....	..	..	..	..	..	..	1	..	1	..	..
Epilepsy 69	....	..	..	..	..	..	..	..	..	..	..	..
Acute Endocarditis 78	....	1	..	..	..	1	..	..	..	..	1	..
Organic Diseases of the Heart 79	....	..	..	..	..	..	..	..	..	2	..	1
Angina Pectoris 80	....	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Arteries, Atheroma, aneurysm, etc. 81	....	..	..	..	..	..	..	..	..	..	..	..
Acute Bronchitis 89	....	2	..	..	..	..	..	..	..	..	..	..
Bronchopneumonia 91	....	1	..	..	..	..	..	..	..	..	..	..
Pneumonia 92	....	1	..	1	..	..	..	..	1	..	1	..
Pleurisy 93	....	..	..	..	..	..	..	..	..	..	..	..
Pulmonary congestion, pulmonary apoplexy. 94	....	..	..	..	..	..	..	..	..	..	..	..
Gangrene of the Lung 95	....	..	..	..	..	1	..	..	..	..	..	..
Pulmonary Emphysema 97	....	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Stomach (cancer excepted) 103	1	..	..	..	..	..	..	..	..	1	1	2
Diarrhœa and enteritis (under 2 years) 104	....	5	1	..	..	..	..	..	..	..	..	..
Diarrhœa and enteritis (2 years and over). 105	....	..	1	..	..	..	..	..	..	..	..	..
Appendicitis and Typhilitis 108	....	..	..	..	..	..	..	..	..	..	1	..
Cirrhosis of the Liver 113	....	..	..	..	..	..	..	..	..	..	..	..
Simple Peritonitis (nonpuerperal) 117	1	..	..	..	..	..	..	..	..	..	..	..
Bright's Disease 120	....	..	..	..	..	..	..	1	..	1	1	..
Gangrene 142	....	..	..	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema. 151	2	..	..	..	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy... 152	1	..	..	..	..	..	..	..	..	..	..	..
Senility 154	....	..	..	..	..	..	..	..	..	..	..	..
Suicide by Poison 155	....	..	..	..	..	..	..	..	1	..	..	..
Conflagration 166	....	..	..	..	..	..	..	..	..	..	1	..
Suing (conflagration excepted) 167	....	1	1	..	..	..	..	..	..	..	..	..
Absorption of Deleterious Gases (conflagration excepted) 168	....	..	1	..	..	..	..	..	..	..	..	..
Accidental Drowning 169	....	..	..	..	..	..	1	..	..	..	..	..
Traumatism by Fall 172	....	..	..	..	..	..	..	..	..	..	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) 175	....	..	..	..	..	..	..	..	..	..	..	..
Homicide by Firearms 182	....	..	..	..	..	..	..	..	..	1	..	..
Other External Violence 186	....	..	..	..	..	..	..	..	..	1	..	..
Cause of Death Not Specified or Ill-defined. 189	....	3	..	..	..	..	..	..	..	..	..	..

Total deaths, 145. Death-rate, 12.86

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
...	...	1	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
1	1	1	...	...	...	...	7	8	7	15	...	...	...	...	2	...	...	...	...	...	...	...	...	6	2	...
1	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
1	...	1	1	...	...	...	...	4	.....	3	...	...	...	1	...	...	...	...	...	...	...	...	3	...	1	...
...	...	...	1	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	1	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	1	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
1	...	...	1	...	...	...	...	2	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
1	1	2	4	4	...	...	7	7	.....	10	...	1	...	1	...	...	...	...	...	...	1	1	7	1	4	2
...	...	1	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	1	...	2	...	...	...	3	2	1	5	...	...	...	...	1	...	...	...	...	...	...	...	2	2	1	...
1	1	2	5	4	...	...	6	10	4	11	...	...	2	1	...	1	...	...	...	...	1	...	9	2	5	...
...	...	1	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	1	...	...	...	3	...	1	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...
...	...	...	1	2	...	...	2	1	.....	2	1	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...
...	...	...	1	...	...	...	2	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
1	...	...	2	...	...	...	4	3	1	7	...	...	...	...	...	...	...	...	...	...	...	...	3	3	1	...
...	...	1	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	1	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	1	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	2	1	...	...	...	4	4	3	6	...	...	1	...	...	...	...	...	...	...	1	...	4	1	2	1
...	...	...	...	...	...	...	3	3	3	6	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
1	...	...	1	...	...	...	2	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...
...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	1	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
1	4	2	1	3	...	...	7	7	5	14	...	...	...	...	...	...	...	...	...	...	...	...	7	3	4	...
...	...	...	1	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	2	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	2	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	1	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	1	...	...	...	...	...	1	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...
1	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	2	...	1	2	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...

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TABLE 7.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES

THE YEAR ENDING

DEATHS IN ATLANTIC CITY.		AGE PERIODS.													
		Under one month.	Under 1 year "not including under one month"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1	..	..	1	..	1	1	1	..	1	1	..	..
Measles	6	..	1	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	7	..	1	1	..	..	..	1	..	..	..	..	..
Whooping Cough	8	..	7	1	..	..	..	..	..	..	..	..	..
Diphtheria and Croup	9	..	..	2	3	3	..	..	1	..	..	..	..
Dysentery	14	..	..	..	..	..	..	..	..	..	..	1	..
Erysipelas	18	..	1	1	..	..	..	..	..	..	..	..	..
Tuberculosis of the Lungs	28	..	1	1	..	1	4	8	10	7	5	9	3
Tuberculous Meningitis	29	..	..	..	2	..	..	1	1	..	..	..	..
Tuberculosis Meningitis	30	..	..	1	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis	31	..	..	..	..	1	..	1	..	..	..	..	1
Tuberculosis of Other Organs	34	..	..	..	1	..	..	1	..	..	..	..	..
Disseminated Tuberculosis	35	..	..	..	..	..	..	1	..	..	..	..	..
Syphilis	37	5	..	..	1	..	..	..	..	..	..	..	..
Gonococcus Infection	38	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant tumors of the buccal cavity	39	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant tumors of the stomach, liver	40	..	..	..	..	..	..	..	..	..	..	1	3
Cancer and Other Malignant tumors of the peritonæum, intestines, rectum	41	..	..	..	..	..	..	..	..	..	..	..	1
Cancer and Other Malignant tumors of the female genital organs	42	..	..	..	..	..	..	..	..	1	..	2	..
Cancer and Other Malignant tumors of the breast	43	..	..	..	..	..	..	1	..	..	1	..	1
Cancer and Other Malignant tumors of the skin	44	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified	45	..	..	..	..	..	..	..	..	..	1	..	..
Other Tumors (tumors of the female genital organs excepted)	46	..	..	..	..	..	..	..	..	1	..	..	..
Acute Articular Rheumatism	47	..	..	..	..	..	..	..	1	..	..	..	..
Diabetes	50	..	..	..	..	1	1	..	..	..	..	..	1
Leuchæmia	53	..	..	..	..	..	..	..	..	..	..	..	..
Anæmia, Chlorosis	54	..	..	..	..	..	..	..	..	..	..	1	1
Other General Diseases	55	..	..	..	..	..	..	..	1	..	..	..	..
Alcoholism (acute or chronic)	56	..	..	..	..	..	..	..	..	2	1	2	1
Simple Meningitis	61	..	1	2	..	..	..	..	..	1	..	..	..
Including Cerebrospinal Fever	61A	..	1	..	..	..	..	..	..	..	..	..	..
Locomotor Ataxia	62	..	..	..	..	..	..	..	..	..	..	..	1
Other Diseases of the Spinal Cord	63	..	..	..	..	..	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	..	..	..	..	1	..	..	..	..	1	1	4
Paralysis Without Specified Cause	66	..	..	..	..	..	..	..	..	..	..	..	1
Epilepsy	69	..	..	..	1	..	..	..	..	..	..	..	..
Convulsions of Infants	71	1	..	..	..	..	..	..	..	..	..	..	..
Neuralgia and Neuritis	73	..	..	..	..	..	..	..	..	..	1	..	..
Other Diseases of the Nervous System	74	..	..	..	..	..	..	..	..	..	..	1	..
Other Diseases of the Eyes and their adnexa	75	..	..	..	1	..	..	..	..	..	..	..	..
Acute Endocarditis	78	..	..	..	1	1	1	..	1	1	1	2	2
Organic Diseases of the Heart	79	..	..	..	1	1	..	2	1	1	7	6	1
Angina Pectoris	80	..	..	..	..	..	..	..	..	..	..	2	1
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	..	..	..	..	..	..	..	1
Embolism and Thrombosis	82	..	..	..	..	..	..	..	..	1	..	..	..
Diseases of the Larynx	87	..	..	..	..	..	..	..	..	..	..	..	..
Acute Bronchitis	89	..	2	..	..	..	..	..	..	..	..	..	..
Chronic Bronchitis	90	..	..	..	..	..	..	..	..	..	..	..	..
Bronchopneumonia	91	..	2	3	..	..	..	..	..	..	1	..	1
Pneumonia	92	2	3	4	..	1	2	3	1	1	6	..	1
Pleurisy	93	..	..	1	..	..	..	..	..	..	..	..	..
Pulmonary Congestion, Pulmonary Apoplexy	94	..	..	1	..	..	1	..	1	1	1	..	1
Asthma	96	..	..	..	..	..	..	1	..	..	..	..	..
Other Diseases of the Respiratory System (tuberculosis excepted)	98	..	..	..	..	..	..	..	..	..	..	..	1

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AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	1	1	1	...	...	...	6	3	.....	6	...	...	1	1	1	...	...	...	...	...	...	...	3	4	2	..
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	..
...	...	...	...	...	...	...	1	2	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	..
...	...	...	...	...	...	...	3	5	2	8	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	..
...	...	...	...	...	...	...	3	3	4	10	...	...	...	...	...	...	...	...	...	...	...	...	...	10	...	..
1	...	3	...	...	1	...	3	3	3	5	1	...	...	...	...	...	...	...	...	...	...	...	2	1	3	..
...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	..
5	1	2	1	...	...	...	30	28	14	49	1	...	1	3	2	...	...	...	...	...	2	...	32	23	3	..
...	...	...	...	...	...	...	2	2	2	3	...	...	...	...	...	...	...	...	...	...	...	1	...	4	...	..
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	..
...	...	...	...	...	...	...	2	1	3	3	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	..
...	1	...	...	...	...	...	2	1	1	2	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	..
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	..
1	...	1	...	...	...	...	4	4	6	3	...	...	...	...	...	...	...	...	...	...	...	...	1	7	...	..
1	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	..
...	...	1	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	..
2	4	3	1	2	...	...	3	3	4	11	...	...	3	...	...	...	1	...	1	...	...	...	3	3	5	..
2	...	4	...	...	...	...	2	5	.....	5	...	...	...	2	...	...	...	...	...	...	...	...	4	1	2	..
1	...	3	...	1	...	...	...	3	2	6	...	...	...	1	...	1	...	...	...	...	...	...	6	...	2	..
...	...	2	1	...	...	...	...	6	.....	4	...	...	1	1	...	...	...	...	...	...	...	...	4	1	1	..
1	...	...	...	...	...	...	...	1	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	..
...	...	2	...	...	...	...	2	1	.....	1	...	...	...	...	...	...	...	...	...	...	1	1	2	1	...	..
...	...	...	...	...	...	...	1	...	.....	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	..
2	...	1	...	...	...	...	1	3	1	4	...	...	...	...	...	...	...	...	...	...	...	...	3	...	1	..
1	...	5	6	...	...	...	4	10	.....	12	...	...	...	2	...	...	...	...	...	...	...	...	7	3	4	..
...	1	1	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	..
1	1	...	...	...	...	...	1	3	.....	4	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	..
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	..
3	...	1	...	...	...	...	2	1	1	2	...	...	...	1	...	...	...	...	...	...	...	...	3	6	1	..
...	...	...	...	...	...	...	3	4	1	4	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	..
...	1	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	..
...	2	...	...	...	...	...	3	...	.....	2	...	...	...	...	...	...	...	...	...	1	...	...	2	...	1	..
...	...	...	1	...	...	...	1	...	.....	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	..
3	4	12	15	2	...	...	21	22	5	30	1	...	5	3	1	...	...	...	...	...	3	1	21	7	15	..
1	2	1	4	1	...	...	4	6	3	9	...	...	...	...	...	...	...	...	...	...	...	1	3	1	1	..
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	..
...	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	..
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	..
1	...	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	..
...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	..
3	2	7	7	...	...	...	16	17	4	21	2	...	6	...	1	...	1	...	2	...	...	...	17	9	7	..
4	7	15	14	5	...	...	30	25	16	49	6	...	2	4	...	...	1	1	...	...	1	1	23	16	16	..
1	2	3	2	1	...	...	6	6	1	9	...	...	...	2	...	...	1	...	...	...	...	...	7	...	5	..
...	1	2	3	2	...	...	7	2	1	3	...	...	...	...	...	...	...	...	...	...	1	...	6	...	3	..
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	..
...	...	...	1	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	..
...	...	...	1	2	...	...	4	1	.....	4	...	...	1	...	...	...	...	...	...	...	...	...	...	2	3	..
...	...	...	3	3	...	...	4	2	.....	5	...	...	...	1	...	...	...	...	...	...	...	...	1	5	...	..
...	1	2	1	...	...	...	8	3	5	11	...	...	...	...	...	...	...	...	...	...	...	...	5	5	1	..
4	4	4	5	4	...	...	22	23	11	39	...	...	1	1	1	...	...	...	...	...	2	1	17	16	12	..
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	..
2	...	4	2	...	1	...	6	9	5	11	...	...	1	1	...	1	1	...	...	...	...	...	10	3	2	..
1	...	...	2	1	...	...	2	3	1	3	...	...	2	...	...	...	...	...	...	...	...	...	2	1	2	..
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	..

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TABLE 7.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN CAMDEN CITY.		AGE PERIODS.												
		Under one month	Under 1 year "not including under one month"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Ulcer of the Stomach	102	..	..	..	..	..	1	..	..	..	3	1	..
Other Diseases of the Stomach (cancer excepted)	103	1	1	..	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	4	32	5	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	..	..	3	1	..	1	1	..	3	1	..	1
Appendicitis and Typhlitis	108	..	..	1	..	..	1	..	1	1	..	1	1
Hernias, Intestinal Obstructions	109	..	..	..	1	..	1	..	..	..	4	1	2
Other Diseases of the Intestines	110	1	..	..	..	..	1	..	..	..	1	..	..
Cirrhosis of the Liver	113	..	..	..	..	..	..	..	..	1	..	..	..
Other Diseases of the Liver	115	..	..	..	..	..	..	..	..	..	..	..	1
Simple Peritonitis (nonpuerperal)	117	1	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Digestive System (cancer and tuberculosis excepted)	118	..	..	..	..	..	..	..	..	..	..	..	2
Acute Nephritis	119	..	..	..	..	..	..	..	1	..	..	..	1
Bright's Disease	120	1	1	..	..	..	..	..	2	2	4	4	5
Other Diseases of the Kidneys and Annexa	122	..	..	..	..	..	..	..	..	2	..	..	..
Diseases of the Bladder	124	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Prostate	126	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Hæmorrhage	135	..	..	..	..	..	..	..	..	3	..	..	..
Puerperal Septichæmia	137	..	..	..	..	..	..	1	2	1	2	..	..
Puerperal Albuminuria and Convulsions	138	..	..	..	..	..	..	..	..	1	1	..	..
Other Diseases of the Skin and Annexa	145	..	..	..	..	..	..	..	..	..	..	1	..
Congenital Malformations (stillbirths not included)	150	2	..	..	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	30	2	1	..	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	8	..	..	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Poison	155	..	..	..	..	..	1	1	..	1	..	..	1
Suicide by Asphyxia	156	..	..	..	..	..	1	..	..	..	2	..	2
Suicide by Hanging or Strangulation	157	..	..	..	..	..	..	..	..	..	..	..	1
Suicide by Firearms	159	..	..	..	..	..	..	1	1	..	..	..	..
Suicide by Cutting or Piercing Instruments	160	..	..	..	..	..	..	..	..	1	..	..	..
Suicide by Jumping from a High Place	161	..	..	..	..	..	..	..	..	..	..	..	..
Conflagration	166	..	..	..	..	..	..	..	..	..	..	..	..
Burns (conflagration excepted)	167	..	..	1	..	1	..	..	..	..	..	..	..
Absorption of Deleterious Gases (conflagration excepted)	168	..	..	..	1	..	..	3	..	1	1	2	2
Accidental Drowning	169	..	..	..	..	..	..	1	1	1	1	..	..
Traumatism by Firearms	170	..	..	..	..	..	..	..	..	..	1	..	1
Traumatism by Fall	172	..	..	..	..	..	..	..	..	1	..	..	1
Traumatism by Machines	174	..	..	..	..	..	..	..	..	..	1	..	..
Traumatism by Other Crushing (vehicles railroad, landslides, etc.)	175	..	..	..	..	2	1	..	1	..	2	..	..
Effects of Heat	179	..	..	..	..	..	..	..	..	..	..	..	..
Electricity (lightning excepted)	181	..	..	..	..	..	..	..	1	..	..	1	2
Homicide by Firearms	182	..	..	..	..	..	1	..	..	1	..	..	..
Homicide by Other Means	184	..	..	..	..	..	..	..	..	..	..	..	..
Other External Violence	186	..	..	1	..	..	..	..	..	..	..	..	..
Cause of Death Not Specified or Ill-defined	189	1	13	1	..	..	..	..	..	..	..	..	..

Total deaths, 796. Death-rate, 16.63.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
1	1	3	...	...	..	..	4	6	3	10	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	1	..
1	...	1	1	1	..	..	2	4	2	4	..	..	1	1	..	..	..	..	..	..	..	..	..	2	2	2	..
...	...	...	...	...	..	..	21	20	10	41	..	..	..	..	..	..	..	..	..	..	..	..	..	...	41	...	..
2	1	2	6	4	..	..	12	14	3	21	2	..	1	2	..	..	..	..	..	..	..	..	..	12	5	9	..
...	...	...	...	...	..	..	2	4	2	5	..	..	..	..	..	..	..	..	..	..	..	1	..	2	4	...	..
1	1	1	2	...	..	..	5	9	2	9	2	..	..	2	..	..	..	..	..	1	..	..	..	2	3	2	..
1	...	1	...	...	1	..	6	...	3	6	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3	1	..
...	...	1	1	...	..	..	1	2	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	2	....	1	..
...	...	1	...	...	..	..	1	1	.....	...	..	..	..	2	..	..	..	..	..	..	..	..	..	2	....	...	..
...	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..
...	...	...	...	...	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	..
1	...	...	2	...	..	..	3	2	2	5	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	1	..
4	6	10	10	6	..	..	25	30	11	42	3	..	2	2	1	..	1	1	2	..	..	1	..	31	5	19	..
...	...	1	...	...	..	..	2	1	1	2	..	1	..	..	..	..	..	..	..	..	..	..	..	2	1	...	..
...	...	1	...	1	..	..	2	...	.....	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	....	1	..
1	...	...	...	1	..	..	2	...	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	..
...	...	...	...	...	..	..	...	3	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	3	....	...	..
...	...	...	...	...	..	..	...	6	1	5	..	..	..	..	..	..	..	..	..	1	..	..	..	6	....	...	..
...	...	...	...	...	..	..	...	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	....	...	..
...	...	...	1	...	..	..	...	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	....	....	2	..
...	...	...	...	...	..	..	2	...	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	..
...	...	...	...	...	..	..	16	17	3	33	..	..	..	..	..	..	..	..	..	..	..	..	..	....	33	...	..
...	...	...	...	...	..	..	5	3	1	8	..	..	..	..	..	..	..	..	..	..	..	..	..	....	8	...	..
...	...	1	2	2	..	..	1	4	.....	2	..	..	..	3	..	..	..	..	..	..	..	..	..	2	1	2	..
...	...	...	...	...	..	..	4	...	1	2	..	..	..	..	..	..	..	..	..	..	..	2	..	2	2	...	..
1	...	...	...	...	..	..	4	2	.....	5	..	..	..	..	..	..	..	..	..	..	..	1	..	2	3	1	..
...	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	1	..	..	..	..	..	..	1	....	...	..
...	2	...	...	...	..	..	4	...	1	3	..	..	1	..	..	..	..	..	..	..	..	..	..	3	1	...	..
...	...	...	...	...	..	..	1	...	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	..
1	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..
...	1	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	..
...	...	...	...	...	..	..	1	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	....	2	...	..
1	...	...	...	...	..	..	7	4	.....	5	1	..	..	3	..	..	..	..	..	..	1	1	..	4	6	1	..
...	...	...	...	...	..	..	2	1	1	2	..	..	..	1	..	..	..	..	..	..	..	..	..	2	2	...	..
...	...	...	...	...	..	..	2	...	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	....	...	..
1	...	...	1	...	..	..	3	1	.....	3	..	..	..	..	..	..	..	..	..	..	..	1	..	2	....	1	..
...	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	..
1	...	1	1	...	..	..	9	...	.....	6	..	..	1	1	1	..	..	..	..	..	..	..	..	5	4	...	..
...	...	1	1	...	..	..	...	2	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	....	....	2	..
...	...	...	...	...	..	..	3	1	1	2	..	..	..	1	..	..	..	..	..	..	..	1	..	3	....	...	1
...	...	...	...	...	..	..	1	1	.....	...	..	..	..	..	2	..	..	..	..	..	..	..	..	....	1	1	..
1	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	..
...	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..
...	...	...	...	...	..	..	10	5	3	15	..	..	..	..	..	..	..	..	..	..	..	..	..	....	15	...	..

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TABLE 8.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BAYONNE.		AGE PERIODS.													
		Under one month	Under 1 year "not including under one month	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1							2		2	1				
Measles	6			2	6	2									
Scarlet Fever	7			1	7	3									
Whooping Cough	8			5	2										
Diphtheria and Croup	9			3	7	3	1								
Including Croup	9A				1										
Erysipelas	18			1										1	
Purulent Infection and Septichæmia	20			1				1							
Tetanus	24						1								
Tuberculosis of the Lungs	28			1	2		2	4	7	3	6		3	7	2
Tuberculous Meningitis	30			4	2	2									
Abdominal Tuberculosis	31			1											
Syphilis	37	1													
Cancer and Other Malignant Tumors of the Stomach, Liver	40										1			1	2
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum	41														
Cancer and Other Malignant Tumors of the Female Genital Organs	42										1			1	1
Cancer and Other Malignant Tumors of the Breast	43														1
Cancer and Other Malignant Tumors of the Skin	44														
Cancer and Other Malignant Tumors of Other Organs or of Organs Not Specified	45														
Acute Articular Rheumatism	47				2	1									
Diabetes	50														
Anæmia, Chlorosis	54				1										
Other General Diseases	55							1							
Alcoholism (acute or chronic)	56										1		1	1	2
Other Chronic Poisonings	59										1				
Simple Meningitis	61			7	3		1	1			1		1		
Including Cerebrospinal Fever	61A			2			1								
Other Diseases of the Spinal Cord	63														
Cerebral Hæmorrhage, Apoplexy	64				1				1	1			1		1
Softening of the Brain	65														
Paralysis Without Specified Cause	66														
Other Forms of Mental Alienation	68														
Epilepsy	69							1							
Convulsions of Infants	71	5		6	1										
Diseases of the Ears	76			1					1						
Acute Endocarditis	78			1		1	1	1					2	2	1
Organic Diseases of the Heart	79	1			2			1					2	2	2
Angina Pectoris	80														
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81													1	
Diseases of the Veins (varices, hæmorrhoids, phlebitis, etc.)	83														
Diseases of the Lymphatic System (lymphangitis, etc.)	84				1										
Acute Bronchitis	89	4	2	3											
Chronic Bronchitis	90														
Bronchopneumonia	91	2	10	9				1							1
Pneumonia	92		15	16	1	1	2	4	5	6		3	3	3	5
Pleurisy	93		1	2		1				1				1	
Pulmonary Congestion, Pulmonary Apoplexy	94	3						1	1	1		1			
Asthma	96											1			
Other Diseases of the Mouth and Annexa	99	1													
Diseases of the Pharynx	100				1										

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	3	2	1	2	..	..	..	1	..	..	1	..	..	..	1	..	3	2	...	..
...	...	...	...	...	...	...	3	7	.....	10	..	..	..	..	..	..	..	..	..	..	..	..	....	10	...	..
...	...	...	...	...	...	...	5	5	.....	10	..	..	..	..	..	..	..	..	..	..	..	..	....	10	...	..
...	...	...	...	...	...	...	5	2	.....	7	..	..	..	..	..	..	..	..	..	..	..	..	....	7	...	..
...	...	...	...	...	...	...	4	10	.....	13	..	..	..	..	..	..	1	..	..	..	..	..	....	14	...	..
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..
...	...	...	...	...	...	...	2	...	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	1	1	...	..
...	...	...	...	...	...	...	1	1	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	....	2	...	..
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..
3	3	3	1	...	...	...	24	33	1	26	2	..	1	9	2	1	10	1	3	..	1	1	37	15	5	..
...	...	...	...	...	...	...	5	3	1	8	..	..	..	..	..	..	..	..	..	..	..	..	....	8	...	..
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..
3	...	2	1	...	...	...	6	5	.....	6	..	..	1	..	..	..	2	1	..	..	..	1	9	1	1	..
...	...	1	2	...	...	...	2	1	.....	2	..	..	..	1	..	..	..	..	..	..	..	..	....	....	3	..
1	...	...	...	...	...	...	...	4	.....	2	..	..	..	1	..	..	..	..	1	..	..	..	3	....	1	..
...	1	...	...	...	...	...	...	2	1	1	..	..	..	..	..	..	1	..	..	..	..	..	2	....	...	..
1	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	..
1	...	...	1	1	..	..	...	3	1	2	..	..	..	1	..	..	..	..	..	..	..	..	....	....	2	..
...	...	...	...	...	...	...	...	3	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	....	3	...	..
...	...	1	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	..
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..
1	...	1	...	...	...	...	6	1	.....	4	..	..	1	..	..	1	1	..	..	..	..	..	5	2	...	..
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	..
...	...	...	...	...	...	...	7	7	.....	11	1	..	..	1	..	..	..	..	1	..	..	..	2	12	...	..
...	...	...	...	...	...	...	1	2	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	....	3	...	..
1	1	...	...	...	...	...	...	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	..
2	6	11	8	5	..	..	21	16	1	14	..	..	5	13	1	1	1	..	1	..	1	..	13	7	17	..
...	...	1	...	...	...	...	...	1	.....	...	..	..	..	1	..	..	..	..	..	..	..	..	....	....	1	..
...	...	1	1	...	...	...	1	1	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	1	....	1	..
...	...	1	...	...	...	...	1	...	.....	...	..	..	..	..	..	..	..	1	..	..	..	..	1	....	...	..
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..
...	...	...	...	...	...	...	7	5	.....	12	..	..	..	..	..	..	..	..	..	..	..	..	....	12	...	..
...	...	...	...	...	...	...	...	2	.....	1	..	..	..	..	..	..	1	..	..	..	..	..	1	1	...	..
1	...	2	3	1	...	...	5	11	.....	11	1	..	1	2	..	..	1	..	..	..	..	..	3	8	..	5
2	5	8	1	1	...	...	15	12	.....	8	2	..	7	5	..	1	..	..	4	..	..	..	14	8	5	..
1	...	1	...	...	...	...	2	...	.....	1	..	..	..	..	1	..	..	..	..	..	..	..	1	1	...	..
...	2	1	2	2	...	...	2	6	1	3	..	..	1	2	..	..	2	..	..	..	..	..	3	....	5	..
...	1	...	...	...	...	...	...	1	.....	...	..	..	..	..	..	..	1	..	..	..	..	..	1	....	...	..
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..
...	...	1	1	2	...	...	4	9	2	12	..	..	..	1	..	..	..	..	..	..	..	..	....	9	4	..
...	...	...	...	1	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	..
...	...	2	...	...	...	...	11	14	2	22	..	..	..	1	..	..	..	..	2	..	..	..	2	21	2	..
3	2	7	4	1	...	...	53	25	6	48	1	..	..	10	3	1	7	1	4	..	1	2	26	46	6	..
...	...	1	...	...	...	...	5	2	.....	4	..	..	..	..	..	..	2	..	1	..	..	..	2	4	1	..
1	1	2	1	...	...	...	8	5	1	8	..	..	..	3	..	..	..	..	2	..	..	..	8	4	1	..
...	1	...	...	...	...	...	1	1	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	1	....	1	..
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	..

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TABLE 8.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BAYONNE	AGE PERIODS.											
	Under one month	Under 1 year "not including under one month	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Ulcer of the Stomach 102	..	..	..	..	..	..	..	..	..	..	..	1
Other Diseases of the Stomach (cancer excepted) ..103	3	9	2	..	..	..	..	..	..	2	..	1
Diarrhœa and Enteritis (under 2 years)....104	12	74	19	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)...105	..	..	4	..	..	2	1	..	..	..	1	1
Appendicitis and Typhlitis 108	..	..	1	..	2	1	..	..	..	..	..	..
Hernias, Intestinal Obstructions 109	..	1	..	..	..	..	..	..	1	..	..	3
Cirrhosis of the Liver 113	..	..	..	..	1	..	..	..	..	2	..	..
Biliary Calculi 114	..	..	..	..	..	..	..	..	..	..	..	..
Simple Peritonitis (nonpuerperal) 117	..	..	..	..	..	..	..	1	..	..	1	1
Acute Nephritis 119	..	..	..	..	..	1	..	..	..	..	..	1
Bright's Disease 120	..	4	1	1	1	2	1	4	2	3	7	4
Uterine Tumor (noncancerous) 129	..	..	..	..	..	..	..	..	..	..	1	..
Cysts and Other Tumors of the Ovary 131	..	..	..	..	..	..	..	1	..	..	..	..
Salpingitis and Other Diseases of the Female Genital Organs ..132	..	..	..	..	..	..	..	1	..	..	..	..
Puerperal Hæmorrhage 135	..	..	..	..	..	..	1	..	..	..	..	..
Other Accidents of Labor 136	..	..	..	..	..	..	..	..	1	..	..	..
Puerperal Septichæmia 137	..	..	..	..	..	..	..	1	..	..	..	..
Puerperal Albuminuria and Convulsions 138	..	..	..	..	..	1	1	..	..	1	..	..
Puerperal Phlegmasia Alba Dolens, Embolus, Sudden Death ..139	..	..	..	..	..	..	..	..	1	..	..	..
Gangrene 142	..	..	..	..	..	..	..	..	..	..	..	1
Other Diseases of the Skin and Annexa 145	..	1	..	..	..	..	..	..	..	..	..	..
Diseases of the Bones (tuberculosis excepted)..146	..	..	..	..	..	1	..	..	..	..	..	..
Congenital Malformations (stillbirths not included) ..150	4	..	..	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema...151	51	7	1	..	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy...152	6	2	..	..	..	..	..	..	..	..	..	..
Lack of Care 153	1	1	..	..	..	..	..	..	..	..	..	..
Senility 154	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Poison 155	..	..	..	..	1	..	1	..	..	..	..	1
Suicide by Asphyxia 156	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Hanging or Strangulation 157	..	..	..	..	..	..	..	..	..	..	..	1
Suicide by Drowning 158	..	..	..	..	..	..	..	..	..	2	..	..
Suicide by Firearms 159	..	..	..	..	..	..	2	..	..	..	..	..
Other Acute Poisonings 165	..	..	..	..	..	1	..	..	..	..	..	..
Burns (conflagration excepted) 167	..	..	3	1	..	..	1	1	2	..	1	..
Absorption of Deleterious Gases (conflagration excepted) ..168	..	..	..	..	..	2	..	1	..	..	..	..
Accidental Drowning 169	..	..	1	..	..	1	..	..	..	1	1	4
Traumatism by Fall 172	..	..	..	..	..	..	..	..	..	3	1	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) ..175	..	..	2	..	..	1	3	3	2	2	..	1
Starvation 177	..	2	..	..	..	..	..	..	..	..	..	..
Effects of Heat 179	..	..	..	1	..	..	3	2	..	..	1	..
Lightning 180	..	..	..	..	..	..	1	..	..	..	..	..
Electricity (lightning excepted) 181	..	..	..	..	..	..	..	1	..	..	..	..
Homicide by Firearms 182	..	..	..	..	..	..	1	..	..	..	..	..
Other External Violence 186	..	1	1	..	..	..	..	..	..	..	..	..
Cause of Death Not Specified or Ill-defined.. 189	1	8	2	..	..	..	..	..	..	..	..	..

Total deaths, 815. Death-rate, 14.00.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	1	...	...	...	...	2	...	.....	1	..	..	..	..	..	..	..	..	1	..	..	..	1	...	1	..
...	...	1	...	...	...	...	10	8	.....	15	..	..	..	1	..	..	2	..	..	..	..	..	8	14	1	..
...	...	...	...	...	...	...	55	50	.....	105	..	..	..	..	..	..	..	..	..	..	..	..	.....	105	..	..
1	1	1	1	2	1	..	7	9	.....	8	1	..	..	3	..	..	..	1	1	..	2	..	6	7	3	..
...	1	...	...	...	...	...	4	1	.....	2	..	..	..	1	..	..	..	..	1	..	..	..	.....	5	..	..
...	...	...	...	...	...	...	..	5	.....	2	..	..	1	..	..	..	1	..	..	..	1	..	3	1	1	..
2	..	...	...	1	...	...	4	2	.....	2	..	..	2	1	..	..	1	..	..	..	..	..	4	1	1	..
...	1	...	...	...	...	...	..	1	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	1	...	...	..
...	...	...	...	...	...	...	2	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	2	1	...	..
1	...	1	1	...	...	...	4	1	.....	2	..	..	..	2	..	..	..	..	..	..	..	..	4	1	...	..
5	1	13	2	...	1	..	28	24	1	22	2	..	5	12	1	1	4	1	3	..	1	..	26	16	10	..
...	...	...	...	...	...	...	...	1	.....	..	..	..	..	..	..	..	..	1	..	..	..	..	1	...	...	..
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	..
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...	...	...	...	...	...	...	23	31	2	59	..	..	..	..	..	..	..	..	..	..	..	..	.....	59	...	..
...	...	...	...	...	...	...	5	3	.....	8	..	..	..	..	..	..	..	..	..	..	..	..	.....	8	...	..
...	...	...	...	...	...	...	..	2	1	2	..	..	..	..	..	..	..	..	..	..	..	..	.....	2	...	..
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1	...	1	...	...	...	...	2	...	.....	..	..	..	..	..	..	..	..	..	..	..	1	1	2	...	...	..
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1	...	...	...	...	...	...	1	2	.....	1	..	..	1	..	..	..	..	..	1	..	..	..	3	...	...	..
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...	...	...	...	...	...	...	4	5	.....	4	..	..	..	..	..	..	3	..	1	..	..	1	4	4	1	..
...	...	...	...	...	...	...	3	...	.....	2	..	..	..	..	1	..	..	..	..	..	..	..	.....	3	...	..
...	...	1	...	...	...	...	9	...	.....	5	..	..	..	..	..	..	..	..	..	..	..	4	3	2	4	..
1	...	1	1	...	...	...	7	...	.....	3	..	..	1	..	..	..	2	..	..	..	..	1	4	1	1	1
...	...	...	3	...	...	...	16	1	1	6	..	..	2	2	2	..	1	..	3	..	1	..	9	3	...	..
...	...	...	...	...	...	...	2	...	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	.....	2	...	..
...	...	...	...	...	...	...	6	1	1	2	..	..	..	2	..	..	..	..	3	..	..	..	2	5	...	..
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	..
...	...	...	...	...	...	...	1	...	.....	...	..	..	1	..	..	..	..	..	..	..	..	..	.....	1	...	..
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...	...	...	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	.....	2	...	..
...	...	...	...	...	...	...	3	3	.....	10	..	..	..	..	..	..	..	..	..	..	..	1	.....	11	...	..

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TABLE 9.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BLOOMFIELD.	AGE PERIODS.												
	Under one month	Under 1 Year "not including under one month"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1						1						
Scarlet Fever 7			1									
Whooping Cough 8			2									
Diphtheria and Croup 9		1	1	1								
Dysentery 14												
Tuberculosis of the Lungs 25						1	2	1		2	2	
Tuberculous Meningitis 30		1	1									
Disseminated Tuberculosis 35									1			
Cancer and Other Malignant Tumors of the Stomach, liver 40												
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum 41												
Cancer and Other Malignant Tumors of the Female Genital Organs 42									1			
Cancer and Other Malignant Tumors of the Breast 43												1
Diabetes 50												
Leuchæmia 53										1		
Anæmia, Chlorosis 54												
Simple Meningitis 61		1	2									
Locomotor Ataxia 62												
Cerebral Hæmorrhage, Apoplexy 64												
Paralysis Without Specified Cause 66												
Other Forms of Mental Alienation 68												
Convulsions of Infants 71	1											
Diseases of the Ears 76												
Pericarditis 77												
Acute Endocarditis 78				1								
Organic Diseases of the Heart 79									1	1		
Angina Pectoris 80												
Diseases of the Arteries, Atheroma, Aneurysm, etc. 81												
Diseases of the Thyreoid Body 88					1							
Acute Bronchitis 89												
Chronic Bronchitis 90												
Bronchopneumonia 91		2										
Pneumonia 92		2		2				1		1		2
Pulmonary Congestion, Pulmonary Apoplexy 94	1			1								
Other Diseases of the Stomach (cancer excepted) 103		2										
Diarrhœa and Enteritis (under 2 years) 104		6	2									
Diarrhœa and Enteritis (2 years and over) 105			1									
Cirrhosis of the Liver 113												1
Other Diseases of the Liver 115												
Bright's Disease 120									1	1		1
Accidents of Pregnancy 134								1				
Congenital Debility, Icterus, and Sclerema 151	2	1										
Other Diseases Peculiar to Early Infancy 152	1											
Lack of Care 153		1										
Senility 154												
Suicide by Poison 155									1			
Burns (conflagration excepted) 167				1								
Absorption of Deleterious Gases (conflagration excepted) 168					1							
Accidental Drowning 169			1									
Traumatism by Fall 172												
Traumatism by Other Crushing (vehicles, Railroad, Landslides, etc.) 175												
Effects of Heat 179		1										
Cause of Death Not Specified or Ill-defined 189		3	1									

Total deaths, 146. Death-rate, 9.27.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
								1		1															1		
								1		1															1		
							22			22															22		
						1	1		1	1															1		
							2			2				1											2		
1			1				6	4	1	10				1	1									6	4		
								2	1	2															2		
								1		1														1			
1	2						1	3		3				1										3			
		1					1			1														1			
								1		1							1							1			
								1		1														1			
		1						1		1															1		
	1						1	1		1		1												1		1	
							2	1		3															3		
		1					1			1														1			
2	1	5	3	4			6	9		9		3	1	1				1						3		7	
			4				2	2		3				1								1		1		3	
		1						1		1														1			
							1			1															1		
			1					1						1		1								1			
		1						1				1													1		
1		1	3				3	3		4				2										1	3	3	
		1	2	1			3	3		5						1								5		1	
			1				1			1														1			
				1			1			1																1	
							1												1								
	1		1					2					2											1		1	
				1				1		1																1	
				2			3	1		3			1													3	
1		1	3	1			7	7	2	9			2	2								1		4	5	5	
	1						1	2		2				1											2	1	
			1				1	2	1	3															2		1
							6	2		8												1			3		
								1																	1		
		1					1	1		2														1		1	
		1						1		1																1	
	2	4	2	2			6	7		8	1		3			1								7		6	
								1						1										1			
							1	2		3															3		
							1			1															1		
								1		1															1		
					1		1				1															1	
								1		1				1										1			
1							1	1				1					1							1	1		
							1			1															1		
1				1			2	1		1				2										3			
			1				1				1															1	
							1			1															1		
							3	1		4															4		

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TABLE 10.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BORDENTOWN.		AGE PERIODS.													
		Under one month	Under 1 Year, "not including under one month"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Influenza	10												
Tuberculosis of the Lungs	28							1	1	2	1		
Acute Miliary Tuberculosis	29									1			
Tuberculous Meningitis	30			1									
Disseminated Tuberculosis	35												
Syphilis	37	1	2										
Cancer and Other Malignant Tumors of the Stomach, Liver	40												
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum	41												
Cancer and Other Malignant Tumors of the Breast	43												
Encephalitis	60			1									
Other Diseases of the Spinal Cord	63						1						
Cerebral Hæmorrhage, Apoplexy	64				1								
Paralysis Without Specified Cause	66												
Other Diseases of the Nervous System	74												
Acute Endocarditis	78					1							
Organic Diseases of the Heart	79												
Angina Pectoris	80												
Chronic Bronchitis	90												
Bronchopneumonia	91												
Pneumonia	92												
Other Diseases of the Stomach (cancer excepted)	103		1									1	
Diarrhœa and Enteritis (under 2 years)	104		2	1									
Hernias, Intestinal Obstructions	109												
Bright's Disease	120			1								1	
Puerperal Albuminuria and Convulsions	138								1				
Congenital Debility, Icterus, and Sclerema	151	2	1										
Lack of Care	153		1										
Suicide by Firearms	159										1		
Poisoning by Food	164												
Other Acute Poisonings	165							1					
Accidental Drowning	169							1	1				
Effects of Heat	179											1	
Cause of Death Not Specified or Ill-defined	189	1											

Total deaths, 81. Death-rate, 13.90.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	1	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	2	3	.....	5	...	...	...	...	...	...	...	...	...	...	...	...	3	1	1	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	1	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	2	1	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	2	2	...	...	...	2	2	.....	4	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...
...	...	1	1	...	...	...	1	1	.....	1	...	...	...	1	...	...	...	...	...	...	...	...	2	...	...	...
...	1	...	1	...	...	...	...	2	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
1	2	4	4	1	...	...	9	4	.....	12	...	...	...	1	...	...	...	...	...	...	...	...	5	3	5	...
...	...	1	3	1	...	...	3	2	.....	3	...	...	...	2	...	...	...	...	...	...	...	...	2	2	1	...
...	...	1	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	1	...	...	...	...	2	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
...	...	...	2	1	...	...	1	2	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...
...	...	...	1	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	1	...	...	...	...	1	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	1	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	1	1	...	...	...	...	2	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
1	...	...	...	...	...	...	1	2	1	2	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...
...	...	...	...	...	...	...	1	2	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
...	...	...	1	...	...	...	...	1	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...
...	1	4	2	2	...	...	8	3	.....	10	1	...	...	...	...	...	...	...	...	...	...	...	6	1	4	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	2	1	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
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...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	2	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...
...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
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TABLE 11.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BRIDGETON.	AGE PERIODS.												
	Under one month	Under 1 year "not including under one month"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1	....	....	....	..	..	3	..	1	..	....	..	..
Measles 6	....	....	1	..	..	..	..	..	..	....	..	..
Scarlet Fever 7	....	....	....	1	..	..	..	..	..	....	..	..
Whooping Cough 8	....	....	....	1	..	..	..	..	..	....	..	..
Diphtheria and Croup 9	....	....	3	..	..	..	..	..	..	....	..	..
Influenza 10	....	....	....	..	..	..	..	..	..	....	..	..
Dysentery 14	....	1	1	..	..	..	..	..	..	....	..	..
Rabies 23	....	....	....	1	..	..	..	..	..	....	..	..
Tuberculosis of the Lungs 28	....	....	....	..	..	1	2	5	3	5	..	2
Acute Miliary Tuberculosis 29	....	1	....	..	..	..	..	..	..	....	1	..
Tuberculous Meningitis 30	....	....	1	..	..	..	..	..	..	....	..	..
Abdominal Tuberculosis 31	....	....	....	..	..	1	..	..	..	....	..	..
Tuberculosis of Other Organs 34	....	....	....	..	..	..	..	1	..	....	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver ...40	....	....	....	..	..	..	..	1	..	....	1	2
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum ...41	....	....	....	..	..	..	..	..	..	....	..	..
Cancer and Other Malignant Tumors of the Female Genital Organs ...42	....	....	....	..	..	..	..	..	..	1	..	..
Cancer and Other Malignant Tumors of the Breast ...43	....	....	....	..	..	..	..	..	..	....	..	..
Cancer and Other Malignant Tumors of the Skin ...44	....	....	....	..	..	..	..	..	..	....	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified ...45	....	....	....	..	..	..	..	..	1	....	..	..
Other Tumors (tumors of the female genital organs excepted) ...46	....	....	....	..	..	..	..	..	..	....	..	..
Other General Diseases 55	....	....	....	..	..	..	..	..	..	....	1	..
Alcoholism (acute or chronic) 56	....	....	....	..	..	..	..	..	..	....	1	..
Simple Meningitis 61	....	1	2	1	..	..	..	..	..	....	..	..
Cerebral Hæmorrhage, Apoplexy 64	....	....	....	..	..	..	..	..	..	....	1	..
Softening of the Brain 65	....	....	....	..	..	..	..	..	..	....	..	..
Paralysis Without Specified Cause 66	....	....	....	..	..	..	..	..	..	....	..	..
Convulsions of Infants 71	1	....	....	..	..	..	..	..	..	....	..	..
Acute Endocarditis 75	....	....	....	..	..	..	..	..	..	....	1	..
Organic Diseases of the Heart 79	....	....	....	..	1	..	1	..	1	....	..	2
Diseases of the Arteries, Atheroma Aneurysm, etc. ...81	....	....	....	..	..	..	..	..	..	....	..	1
Embolism and Thrombosis 82	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Larynx 87	....	....	....	..	..	..	1	..	..	1	..	..
Acute Bronchitis 89	....	1	....	..	..	..	..	..	..	....	..	..
Chronic Bronchitis 90	....	....	....	..	..	..	..	..	..	....	..	..
Bronchopneumonia 91	....	....	....	..	..	..	..	..	..	....	..	..
Pneumonia 92	....	3	2	..	..	..	..	..	..	....	..	..
Pleurisy 93	....	....	....	..	..	..	..	..	..	....	..	..
Pulmonary Congestion, Pulmonary Apoplexy ...94	....	....	....	..	..	..	..	..	..	....	..	..
Asthma 96	....	....	....	..	..	..	..	..	..	....	..	..
Ulcer of the Stomach 102	....	....	....	..	..	..	1	..	..	....	..	..
Other Diseases of the Stomach (cancer excepted) ..103	....	....	....	..	..	..	..	..	..	1	..	..
Diarrhœa and Enteritis (under 2 years) 104	....	10	4	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (2 years and over)...105	....	....	1	..	..	..	..	..	..	....	1	..
Appendicitis and Typhlitis 108	....	....	....	..	..	1	..	..	..	....	..	..
Hernias, Intestinal Obstructions 109	....	....	....	..	..	..	..	..	..	....	..	..
Other Diseases of the Intestines 110	....	....	....	1	..	..	..	..	..	....	..	..
Cirrhosis of the Liver 113	....	....	....	..	..	..	..	..	..	....	..	..
Bright's Disease 120	....	....	....	..	1	..	..	..	1	....	1	1
Calculi of the Urinary Passages 123	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Bladder 124	....	....	....	..	..	..	..	..	..	....	..	..

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	3	1	1	4	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	3	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
...	...	...	1	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	1	1	1	...	...	3	2	.....	4	...	...	...	...	...	...	...	...	...	...	...	1	2	2	1	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
5	1	4	2	1	...	...	16	14	1	27	...	...	1	1	...	...	...	...	1	...	...	...	16	6	8	...
...	...	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
1	...	1	...	...	...	...	1	2	.....	2	...	...	1	...	...	...	...	...	...	...	...	...	2	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	1	...	...	...	...	...	1	4	1	5	...	...	...	...	...	...	...	...	...	...	...	...	2	1	2	...
...	...	...	2	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
1	...	2	...	...	...	...	...	2	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...
...	...	1	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	1	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	1	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
...	...	...	...	...	...	...	2	2	.....	4	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...
2	4	6	5	4	...	...	7	15	.....	20	1	...	1	...	...	...	...	...	...	...	...	...	10	2	10	...
...	...	...	1	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	1	1	2	4	...	...	3	5	.....	7	...	...	...	...	...	1	...	...	...	...	...	...	4	1	3	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	3	...	2	1	...	...	3	3	.....	7	...	...	...	...	...	...	...	...	...	...	...	...	2	1	4	...
4	1	5	6	3	...	...	13	10	3	19	1	...	1	1	...	...	...	...	...	...	...	1	11	6	6	...
...	...	...	1	...	...	...	1	1	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	1	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	1	...	...	...	2	1	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...
...	...	...	1	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...
...	...	1	2	...	...	...	3	...	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...
...	...	...	...	1	1	...	...	2	.....	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	...
...	1	2	4	...	2	...	5	9	2	14	...	...	...	...	...	...	...	...	...	...	...	...	5	5	4	...
...	...	3	...	...	...	...	3	1	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...
...	...	1	3	...	...	...	3	2	.....	4	...	...	...	...	...	...	...	...	...	...	...	...	3	...	1	...
...	...	1	...	...	...	...	...	1	.....	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	1	...	...	...	1	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
...	...	...	...	...	...	...	9	5	3	14	...	...	...	...	...	...	...	...	...	...	...	...	...	14	...	...
...	...	...	1	...	...	...	1	3	.....	2	...	...	...	...	...	...	1	...	...	...	...	...	1	1	1	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	3	...	...	...	3	...	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	1	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	4	5	4	3	1	...	12	8	1	18	...	...	3	...	...	...	...	...	...	...	...	...	14	3	4	...
...	...	1	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	1	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...

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TABLE 11.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BRIDGETON.		AGE PERIODS.													
		Under one month	Under 1 Year "not Including under one month"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Nonvenereal Diseases of the Male Genital Organs	127	....	....	....	..	..	..	..	..	..	....	..	1
Salpingitis and Other Diseases of the Female Genital Organs	132	....	....	....	..	..	..	..	..	..	....	2	..
Puerperal Albuminuria and Convulsions	138	....	....	....	..	..	..	..	..	..	1	..	..
Gangrene	142	....	....	....	..	..	..	..	..	..	....	..	..
Congenital Debility, Icterus, and Sclerema	151	5	....	....	..	..	..	..	..	..	....	..	..
Other Diseases Peculiar to Early Infancy	152	1	....	....	..	..	..	..	..	..	....	..	..
Lack of Care	153	....	2	....	..	..	..	..	..	..	....	..	..
Senility	154	....	....	....	..	..	..	..	..	..	....	..	..
Suicide by Poison	155	....	....	....	..	..	..	..	..	1	....	..	..
Suicide by Firearms	159	....	....	....	..	..	..	1	..	..	....	..	..
Traumatism by Firearms	170	....	....	....	..	..	..	..	..	..	....	..	..
Traumatism by Fall	172	....	....	....	..	..	..	..	1	..	....	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	....	....	....	..	..	..	..	..	..	....	..	1
Electricity (lightning excepted)	181	....	....	....	..	..	..	..	1	..	....	..	..
Homicide by Firearms	182	....	....	....	..	..	..	1	..	..	....	..	..
Homicide by Other Means	184	....	....	....	..	1	..	..	..	..	....	..	..
Cause of Death Not Specified or Ill-defined	189	....	3	....	..	..	..	..	..	..	....	..	..

Total deaths, 247. Death-rate, 17.24.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
							1			1															1		
								2	1	2														2			
								1		1															1		
				1				1		1																1	
							4	1		5															5		
								1		1																	
								2		2															2		
		1			1		1	1		2																2	
								1		1														1			
							1			1														1			
	1						1			1																1	
			2				1	2		2			1												1	2	
							1		1	1														1			
							1			1			1											1			
								1		1														1			
							1			1															1		
							1			1																1	
								2		2																2	

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TABLE 12.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN BURLINGTON CITY.	AGE PERIODS.												
	Under one month	Under 1 year "not including under 1 mo."	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Scarlet Fever 7	..	..	1	..	..	..	..	..	..	..	..	..
Whooping Cough 8	..	1	..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup 9	..	..	..	..	1	..	..	..	..	..	..	..
Influenza 10	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas 18	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis of the Lungs 28	..	..	..	..	..	1	2	2	1	2	1	..
Abdominal Tuberculosis 31	..	..	..	..	1	..	..	..	..	1	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver 40	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not specified 45	..	..	..	..	..	..	..	..	..	..	..	..
Diabetes 50	..	..	..	..	..	..	..	..	..	..	..	..
Alcoholism (acute or chronic) 56	..	..	..	..	..	..	..	..	..	..	1	2
Cerebral Hæmorrhage, Apoplexy 64	..	..	..	..	..	1	..	..	..	..	1	..
Acute Endocarditis 78	..	..	..	..	1	..	..	..	..	..	..	..
Organic Diseases of the Heart 79	..	..	..	..	..	..	..	..	..	..	1	..
Angina Pectoris 80	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc. 81	..	..	..	..	..	..	..	..	1	..	..	..
Embolism and Thrombosis 82	..	..	..	..	..	..	..	..	..	..	..	..
Acute Bronchitis 89	..	..	1	..	..	..	..	..	..	..	..	..
Bronchopneumonia 91	..	2	..	..	..	..	..	..	..	..	..	..
Pneumonia 92	..	3	4	..	..	..	..	..	..	..	1	..
Pulmonary Congestion, Pulmonary Apoplexy 94	..	..	..	..	..	..	..	1	..	..	..	..
Diarrhœa and Enteritis (under 2 years) 104	..	4	1	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over) 105	..	..	..	1	..	..	..	..	..	..	..	..
Hernias, Intestinal Obstructions 109	..	..	..	..	..	..	..	1	..	..	..	..
Cirrhosis of the Liver 113	..	..	..	..	..	..	..	..	..	..	1	..
Acute Nephritis 119	..	..	..	..	..	..	..	..	..	..	..	..
Bright's Disease 120	..	1	..	..	..	..	..	..	..	1	..	..
Other Diseases of the Kidneys and Annexa 122	..	..	..	..	..	..	..	..	..	..	..	..
Uterine Tumor (noncancerous) 129	..	..	..	..	..	..	..	..	..	..	..	..
Cysts and Other Tumors of the Ovary 131	..	..	..	..	..	..	..	..	..	..	..	..
Accidents of Pregnancy 134	..	..	..	..	..	..	..	..	1	..	..	..
Puerperal Hæmorrhage 135	..	..	..	..	..	..	..	1	..	..	..	..
Puerperal Septichæmia 137	..	..	..	..	..	..	..	..	1	..	..	..
Congenital Debility, Icterus, and Sclerema 151	4	..	..	..	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy 152	..	1	..	..	..	..	..	..	..	..	..	..
Senility 154	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Hanging or Strangulation 157	..	..	..	..	..	..	..	..	..	1	..	..
Suicide by Drowning 158	..	..	..	..	..	..	..	..	..	1	..	..
Accidental Drowning 169	..	..	..	..	1	..	1	..	..	..	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) 175	..	..	..	..	..	..	..	..	1	..	..	..
Cause of Death Not Specified or Ill-defined 189	..	2	..	..	..	..	..	..	..	..	..	..

Total deaths, 122. Death-rate, 14.53.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
								1		1																
							1			1														1		
								1		1														1		
				1				1		1															1	
		1					1							1												
		2					6	5	2	2	1					1								7	2	
							1	1	1	2													1	1		
			2				1	1		2													2			
	1		1					2		2														1	1	
		1					2	1		1													1			
	2	1	1	2			4	1		3				1									2	1	1	
		1	1				2	2		4				1									1	1	6	
		1	1				2	1		2													2	1		
1	2	5	1	2			8	4		10			1									1	2	1	2	1
	1						1		1	1															1	
		1	1	1			2	1	1	2				2									2		2	
		1					1			1													1			
							1			1														1		
1							2	1	1	2													1	2		
1	1	1	1	1			3	5	1	12													4	3	1	
				1			2	2		2													1		1	
							1	4		5														5		
								1		1														1		
								1		1														1		
							1													1			1			
			1					1		1																
1	1	5	6	1			9	7	3	16													7	3	7	
			1					1		1															1	
		1					1							1											1	
			1					1		1														1		
								1		1														1		
								1		1														1		
								1	1	1																
							3	1		4															4	
							1			1															1	
			1	2			1	2	1	3														1	2	
							1			1													1			
								1		1															1	
							2		1	2															2	
							1			1															1	
			1				2	1	1	3													1	2		

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TABLE 13.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN CAMDEN CITY.		AGE PERIODS.												
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1	....	....	....	....	....	1	4	1	....	....	2	2
Measles	6	....	2	12	1	....	....	....	....	....	....	....	....
Scarlet Fever	7	....	....	2	....	1	....	....	....	....	....	....	....
Whooping Cough	8	1	7	8	....	....	....	....	....	....	....	....	....
Diphtheria and Croup	9	....	....	11	5	2	....	2	....	1	....	1	....
Including Croup	9A	....	1	14	....	....	....	....	....	....	....	....	....
Dysentery	14	....	....	1	....	....	....	....	....	....	....	....	....
Erysipelas	18	....	1	....	....	....	....	....	....	....	....	1	....
Purulent Infection and Septichæmia	20	....	....	....	1	....	....	1	....	....	....	....	1
Tetanus	24	1	....	....	1	1	1	....	....	....	....	....	....
Beriberi	27	....	....	....	....	....	....	....	....	....	....	....	....
Tuberculosis of the Lungs	28	....	1	3	3	....	10	27	19	26	18	18	8
Acute Miliary Tuberculosis	29	....	....	....	....	....	....	2	1	....	1	1	....
Tuberculous Meningitis	30	....	1	3	1	....	....	....	....	....	....	....	....
Abdominal Tuberculosis	31	....	....	....	....	3	1	1	....	....	....	....	3
Pott's Disease	32	....	....	....	....	....	....	1	....	....	....	....	....
Tuberculosis of Other Organs	34	....	....	....	....	....	....	....	....	2	....	....	....
Disseminated Tuberculosis	35	1	....	....	....	....	....	....	....	....	....	1	....
Syphilis	37	....	1	....	....	....	....	....	....	....	....	1	....
Gonococcus Infection	38	....	....	....	....	....	....	....	1	....	....	....	....
Cancer and Other Malignant Tumors of the Buccal Cavity	39	....	....	....	....	....	....	....	....	....	1	....	....
Cancer and Other Malignant Tumors of the Stomach, Liver	40	....	....	....	....	....	....	....	....	1	1	2	2
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum	41	....	....	....	....	....	....	....	....	....	2	....	....
Cancer and Other Malignant Tumors of the Female Genital Organs	42	....	....	....	....	....	....	....	1	....	2	2	3
Cancer and Other Malignant Tumors of the Breast	43	....	....	....	....	....	....	1	....	....	....	1	....
Cancer and Other Malignant Tumors of the Skin	44	....	....	....	....	....	....	....	....	....	....	....	....
Cancer and Other Malignant Tumors of Other Organs or of Organs not specified	45	....	....	....	....	....	....	....	....	....	....	....	....
Other Tumors (tumors of the female genital organs excepted)	46	....	....	....	....	....	1	....	....	....	....	....	1
Acute Articular Rheumatism	47	....	....	1	2	....	....	....	....	....	....	....	1
Chronic Rheumatism and Gout	48	....	....	....	....	....	....	....	....	....	....	....	....
Diabetes	50	....	....	....	....	....	....	....	1	....	....	....	....
Exophthalmic Goitre	51	....	....	....	....	....	....	....	....	....	....	....	....
Leuchæmia	53	....	....	....	....	....	....	....	....	....	....	....	....
Anæmia, Chlorosis	54	....	....	....	....	....	....	....	....	....	....	....	....
Other General Diseases	55	3	....	....	....	....	....	....	....	....	....	....	....
Alcoholism (acute or chronic)	56	....	....	....	....	....	....	....	....	....	1	2	4
Chronic Lead Poisoning	57	....	....	....	....	....	....	....	1	....	....	....	....
Simple Meningitis	61	4	4	5	....	....	....	....	1	1	....	....	....
Including Cerebrospinal Fever	61A	....	1	1	....	....	....	....	....	....	....	....	....
Locomotor Ataxia	62	....	....	....	....	....	....	....	....	....	....	....	....
Other Diseases of the Spinal Cord	63	....	....	....	....	....	....	....	....	....	....	....	....
Cerebral Hæmorrhage, Apoplexy	64	....	....	1	....	....	1	....	....	1	....	2	10
Softening of the Brain	65	....	....	....	....	....	....	....	....	....	....	....	....
Paralysis Without Specified Cause	66	....	....	....	....	....	....	....	....	....	....	1	3
Other Forms of Mental Alienation	68	....	....	....	....	....	....	....	....	....	....	....	....
Epilepsy	69	....	....	....	....	....	....	....	....	....	....	....	....
Convulsions of Infants	71	5	3	2	....	....	....	....	....	....	....	....	....
Neuralgia and Neuritis	73	....	....	....	....	....	....	....	....	....	....	....	....
Other Diseases of the Nervous System	74	....	....	....	....	....	....	....	1	....	....	....	....
Pericarditis	77	....	....	1	1	1	....	....	....	....	....	....	1
Acute Endocarditis	78	....	1	....	1	5	2	....	4	....	2	4	6
Organic Diseases of the Heart	79	5	2	1	5	6	1	1	1	3	2	7	3

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	7	2	2	6	..	..	..	1	..	..	1	2	..	..	..	..	5	5	..	..
...	...	...	...	...	...	...	7	8	3	15	..	..	..	..	..	..	..	..	..	..	..	..	....	15	..	..
...	...	...	...	...	...	...	..	3	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	....	3	..	..
...	...	...	...	...	...	...	8	8	.....	15	..	..	..	..	1	..	..	..	..	..	..	..	....	16	..	..
...	...	...	...	...	...	...	10	12	.....	21	..	..	..	..	..	..	..	..	..	..	..	1	3	19	..	..
...	...	...	...	...	...	...	8	7	.....	15	..	..	..	..	..	..	..	..	..	..	..	..	....	15	..	..
...	...	...	1	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
...	1	...	...	...	...	...	1	2	.....	2	..	..	..	..	..	..	..	..	1	..	..	..	1	2	..	..
...	1	1	...	1	...	...	3	3	.....	4	..	1	..	..	1	..	..	..	..	..	..	..	3	2	1	..
...	1	...	...	...	...	...	4	1	1	5	..	..	..	..	..	..	..	..	..	..	..	..	....	5	..	..
1	...	...	...	...	...	...	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
10	5	16	2	1	...	...	98	69	29	136	1	..	13	5	2	..	3	..	3	..	..	2	2	78	75	14	..
...	...	...	...	...	...	...	2	3	2	5	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	..
...	...	...	...	...	...	...	2	3	.....	5	..	..	..	..	..	..	..	..	..	..	..	..	..	....	5	..	..
...	...	...	...	...	...	...	3	5	2	8	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4	..	..
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	..
...	...	...	...	...	...	...	2	...	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	..
...	...	...	...	...	...	...	2	...	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
...	...	...	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
...	...	...	...	...	...	...	1	...	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	..
...	...	1	1	...	...	...	3	...	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	2	....	..	..
2	5	10	5	3	...	...	16	15	2	22	2	1	2	1	1	..	..	..	..	..	..	1	1	22	1	8	..
2	...	4	1	1	...	...	6	4	1	8	1	..	..	1	..	..	..	..	..	..	..	..	..	6	4	..	..
...	1	8	...	1	...	...	...	18	.....	12	4	..	..	1	..	1	..	..	..	..	..	..	..	12	1	5	..
1	...	1	...	...	...	...	...	4	.....	3	..	..	..	1	..	..	..	..	..	..	..	..	..	2	2	..	..
1	...	1	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	....	..	..
1	...	3	3	1	...	...	2	6	.....	5	..	..	2	1	..	..	..	..	..	..	..	..	..	5	....	3	..
...	...	...	...	...	...	...	1	1	.....	1	..	..	..	..	1	..	..	..	..	..	..	..	..	1	1	..	..
...	...	...	1	...	...	...	2	3	.....	5	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	..	..
...	...	...	...	1	...	...	...	1	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	....	..	..
...	1	3	...	...	...	...	3	2	1	4	..	..	1	..	..	..	..	..	..	..	..	..	..	4	....	1	..
...	...	1	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	..
2	...	...	...	...	...	...	1	1	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	..	2	....	..	..
1	...	2	...	...	...	...	2	1	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	3	....	..	..
...	...	...	1	...	...	...	2	2	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	..	..
...	1	2	...	...	...	...	9	2	1	8	..	..	..	..	..	..	..	..	1	..	..	..	2	5	2	2	2
...	...	...	...	...	...	...	1	...	.....	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	....	..	..
...	...	...	...	...	...	...	7	8	2	14	..	..	..	..	..	..	..	..	..	..	..	1	..	2	13	..	..
...	...	...	...	...	...	...	1	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	....	2	..	..
...	...	...	1	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	..
1	...	1	...	...	...	...	...	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	....	..	..
6	12	31	21	15	2	..	53	49	11	81	5	..	9	4	2	1	..	..	..	..	..	..	..	50	13	38	1
...	...	4	...	...	...	...	1	3	.....	1	..	..	..	2	..	..	..	..	..	..	..	1	..	1	....	3	..
2	3	5	6	4	...	...	10	14	.....	16	2	..	..	6	..	..	..	..	..	..	..	..	..	8	2	14	..
...	...	1	2	...	...	...	1	2	1	2	..	..	..	1	..	..	..	..	..	..	..	..	..	1	....	2	..
...	1	...	...	...	...	...	...	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	..	..
...	...	...	1	...	...	...	5	5	1	10	..	..	..	..	..	..	..	..	..	..	..	..	..	....	10	..	..
...	...	...	...	1	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	..
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	..	..
...	...	...	...	1	...	...	2	3	.....	3	..	..	..	1	..	..	..	..	1	..	..	..	..	1	3	1	..
2	6	9	5	5	...	...	26	26	4	35	4	..	4	2	..	..	1	..	1	..	..	2	3	27	13	11	1
7	5	23	23	7	...	...	48	54	4	75	5	..	8	10	..	..	1	1	..	..	..	2	..	48	24	30	..

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TABLE 13.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN CAMDEN CITY.		AGE PERIODS.												
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Angina Pectoris	80												
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	1								1	1		
Embolism and Thrombosis	82				1								
Diseases of the Veins (varices, hæmorrhoids, phlebitis, etc.)	83									1			
Diseases of the Larynx	87		1										1
Acute Bronchitis	89		4	1									
Bronchopneumonia	91	3	10	7					1	1	2		1
Pneumonia	92	9	42	41	1		2	2	5	5	4	10	5
Pleurisy	93											1	
Pulmonary Congestion, Pulmonary Apoplexy	94	2	3	3	1			1					
Asthma	96												
Other Diseases of the Respiratory System (tuberculosis excepted)	98												
Other Diseases of the Mouth and Annexa	99											1	
Diseases of the Pharynx	100						1						
Ulcer of the Stomach	102												1
Other Diseases of the Stomach (cancer excepted).	103	2	3	1	1				1	1			
Diarrhœa and Enteritis (under 2 years)	104	9	78	14									
Diarrhœa and Enteritis (2 years and over)	105			2	2								
Appendicitis and Typhilitis	108				1		4	1	1			1	
Hernias, Intestinal Obstructions	109			1							1	1	1
Other Diseases of the Intestines	110										1		
Cirrhosis of the Liver	113										1	1	2
Other Diseases of the Liver	115												
Simple Peritonitis (nonpuerperal)	117						1						
Acute Nephritis	119			1			1						
Bright's Disease	120	1	2	1				2	2	5	5	14	5
Calculi of the Urinary Passages	123												
Diseases of the Bladder	124								1				
Other Diseases of the Uretha, Urinary Abscess, etc.	125												
Uterine Tumor (noncancerous)	129											1	
Other Diseases of the Uterus	130									1	1		
Cysts and Other Tumors of the Ovary	131										1		
Salpingitis and Other Diseases of the Female Genital Organs	132									1			
Accidents of Pregnancy	134							2			2		
Puerperal Hæmorrhage	135						2	2			1		
Other Accidents of Labor	136								1				
Puerperal Septichæmia	137								2	2	1		
Puerperal Albuminuria and Convulsions	138						1	2	2		1	1	
Puerperal Phlegmasia Alba Dolens, Embolus, Sudden Death	139									1			
Gangrene	142												
Acute Abscess	144			1									
Other Diseases of the Skin and Annexa	145		1					1				1	
Diseases of the Bones (tuberculosis excepted)	146								1	1			
Diseases of the Bones (tuberculosis and rheumatism excepted)	147								1				
Congenital Malformations (stillbirths not included)	150	1	1										
Congenital Debility, Icterus, and Sclerema	151	93	8	1									
Other Diseases Peculiar to Early Infancy	152	7	9	2									
Lack of Care	153	1											
Senility	154												
Suicide by Poison	155					1	1			1	1	1	
Suicide by Asphyxia	156												

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure 1 in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
1	...	1	2	1	..	..	5	2	1	5	1	..	1	..	..	..	..	..	..	..	..	..	5	....	2	...
...	2	...	5	3	1	..	7	7	1	11	..	..	2	..	..	..	..	..	..	..	..	1	4	3	7	...
...	...	1	...	...	..	..	1	1	2	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
...	...	...	1	...	..	..	...	2	1	1	..	..	1	..	..	..	..	..	..	..	..	..	2	...	...	...
...	...	...	...	...	..	..	1	1	.....	1	1	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
...	1	2	2	...	..	..	6	4	.....	10	..	..	..	..	..	..	..	..	..	..	..	..	1	6	3	...
1	...	7	4	1	..	..	15	23	7	33	..	1	1	2	..	..	..	..	..	..	..	1	4	24	10	...
5	10	18	8	3	..	..	92	78	23	137	4	..	11	3	6	1	3	1	2	..	2	45	101	24	...
...	...	...	1	...	..	..	1	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...
2	2	2	1	1	..	..	8	10	3	14	1	..	..	1	..	..	..	..	2	..	..	..	6	9	3	...
...	...	1	1	1	..	..	1	2	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	...
...	1	...	1	...	..	..	1	1	.....	1	1	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...
...	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
...	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
...	...	1	2	1	..	..	5	3	3	3	..	..	1	2	..	..	..	..	..	..	2	..	1	3	4	...
...	...	...	...	...	..	..	52	49	11	101	..	..	..	..	..	..	..	..	..	..	..	..	....	101	...	...
2	...	2	2	...	1	..	3	3	.....	9	..	..	..	2	..	..	..	..	..	..	..	..	1	6	4	...
...	...	...	...	...	..	..	4	4	1	7	..	..	..	..	..	..	..	..	..	..	..	1	1	7	...	...
1	...	2	1	...	..	..	4	4	1	7	..	..	..	1	..	..	..	..	..	..	..	..	5	1	2	...
...	...	1	...	...	..	..	1	1	.....	1	..	..	1	..	..	..	..	..	..	..	..	..	1	1	...	...
2	...	3	2	...	..	..	7	4	.....	6	..	..	4	1	..	..	..	..	..	..	..	..	3	1	2	...
1	...	2	...	...	..	..	...	3	1	2	..	..	..	..	..	..	..	..	1	..	..	..	1	....	2	...
...	...	...	1	...	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...
...	...	...	...	1	..	..	2	2	.....	2	1	..	..	..	1	..	..	..	..	..	..	..	1	2	1	...
8	8	34	31	14	3	..	69	69	10	107	4	1	13	7	1	2	1	..	1	..	1	..	77	17	44	...
...	1	...	...	...	..	..	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	...
1	...	1	1	1	..	..	4	1	.....	4	..	..	..	1	..	..	..	..	..	..	..	..	3	1	1	...
...	1	...	...	...	..	..	1	...	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
...	1	...	...	...	..	..	...	2	1	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
...	...	...	...	...	..	..	...	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
1	...	...	2	...	..	..	...	4	.....	3	..	..	1	..	..	..	..	..	..	..	1	..	2	....	2	...
...	...	...	...	...	..	..	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
...	...	...	...	...	..	..	...	4	.....	1	..	..	1	..	1	..	1	..	..	..	..	..	4	....	...	...
...	...	...	...	...	..	..	...	6	2	3	..	..	1	..	..	..	1	..	1	..	..	..	2	4	...	...
...	...	...	...	...	..	..	...	1	.....	..	..	..	..	..	1	..	..	..	..	..	..	..	1	....	...	...
...	...	...	...	...	..	..	...	5	1	3	..	..	..	..	..	..	..	..	..	..	..	2	5	....	...	...
...	...	...	...	...	..	..	...	8	.....	7	1	..	..	..	..	..	..	..	..	..	..	..	3	....	...	...
...	...	...	...	...	..	..	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
...	...	2	1	...	1	..	3	1	1	3	..	..	..	1	..	..	..	..	..	..	..	..	....	1	3	...
...	...	...	...	...	..	..	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	1	...	...	..	..	2	2	1	4	..	..	..	..	..	..	..	..	..	..	..	..	2	2	...	...
...	...	...	...	...	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	2	....	...	...
...	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	...	...	...	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	...	...
...	...	...	...	...	..	..	56	46	9	102	..	..	..	..	..	..	..	..	..	..	..	..	....	102	...	...
...	...	...	...	...	..	..	9	9	1	18	..	..	..	..	..	..	..	..	..	..	..	..	....	18	...	...
...	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	...	6	6	3	..	3	9	1	8	1	..	..	1	..	..	..	..	..	..	1	1	2	1	9	...
1	...	...	...	...	..	..	5	1	.....	6	..	..	..	..	..	..	..	..	..	..	..	..	2	3	1	...
1	1	...	...	...	..	..	2	...	.....	1	..	..	1	..	..	..	..	..	..	..	..	..	2	....	...	...

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TABLE 13.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN CAMDEN CITY.	AGE PERIODS.												
	Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Suicide by Hanging or Strangulation 157	....	....	....	..	..	1	..	..	..	1	..	..
Suicide by Drowning 158	....	....	....	..	..	..	1	..	..	....	..	..
Suicide by Firearms 159	....	....	....	..	..	..	1	..	..	1	1	..
Suicide by Cutting or Piercing Instruments...160	....	....	....	..	..	..	..	..	..	1	..	..
Other Acute Poisonings 165	....	....	1	..	..	..	..	..	1	....	..	..
Burns (conflagration excepted) 167	....	....	5	2	2	..	1	..	1	....	2	2
Accidental Drowning 169	....	....	....	1	5	2	1	..	..	2	..	1
Traumatism by Firearms 170	....	....	....	..	1	..	..	..	..	....	1	..
Traumatism by Fall 172	....	1	....	1	..	..	2	1	..	1	1	2
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) ..175	....	....	2	2	..	5	2	2	3	2	5	3
Injuries by Animals 176	....	....	....	..	..	..	..	..	..	....	..	1
Excessive Cold 178	....	....	....	..	..	..	..	..	..	....	..	..
Effects of Heat 179	3	1	....	..	..	..	..	..	1	1	..	..
Electricity (lightning excepted) 181	....	....	....	..	..	..	..	..	..	....	1	..
Homicide by Firearms 182	....	....	....	..	..	1	..	..	..	....	..	..
Homicide by Cutting or Piercing Instruments..183	....	....	....	..	..	1	..	..	..	....	..	..
Homicide by Other Means 184	1	....	....	..	..	..	..	..	..	....	..	..
Cause of Death Not Specified or Ill-defined...189	1	7	2	..	..	..	..	..	..	....	..	..

Total deaths, 1,626. Death-rate, 16.80.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911. —*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
1							3			2		1											2	1		
								1		1														1		
2							5			3		1										1	2	1	1	1
							1					1											1			
								2		2													1	1		
			1				6	11	1	14			1	1								1	5	11	1	
2		1					16		1	13									1			2	2	10	1	3
							1	1		2													1	1		
3	2	2	4	3			16	8		18	1		2				1					2	13	5	6	
	2	1	1				28	2	3	20	1		2		2							4	11	14	2	3
							1															1				1
	1	1	1				3		1	3															3	
		2	1				9			6			1	2										7	2	
							1						1										1			
							1		1	1														1		
							1		1	1														1		
						1	1															1		1		
							4	7		11														10	1	

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TABLE 14.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN DOVER.	AGE PERIODS.												
	Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1					1							
Scarlet Fever 7					1							
Whooping Cough 8		1	1									
Tuberculosis of the Lungs 28						1	1	1		1	1	
Tuberculosis of Other Organs 34												
Cancer and Other Malignant Tumors of the Stomach, Liver 40												
Alcoholism (acute or chronic) 56												
Simple Meningitis 61	1	1										
Other Diseases of the Spinal Cord 63												
Cerebral Hæmorrhage, Apoplexy 64										1		2
Acute Endocarditis 78												
Organic Diseases of the Heart 79	1											
Diseases of the Arteries, Atheroma, Aneurysm, etc. 81												
Diseases of the Larynx 87											1	
Acute Bronchitis 89		2	1									
Chronic Bronchitis 90												
Pneumonia 92								1			2	1
Pleurisy 93		1										
Diseases of the Pharynx 100				2								
Other Diseases of the Stomach (cancer excepted) 103		1								1		
Diarrhœa and Enteritis (under 2 years) 104		2	1									
Diarrhœa and Enteritis (2 years and over) 105												
Hernias, Intestinal Obstructions 109				1								
Other Diseases of the Liver 115		1										
Bright's Disease 120			1	1				1				
Puerperal Hæmorrhage 135							1					
Puerperal Albuminuria and Convulsions 138								1				
Congenital Malformations (stillbirths not included) 150	3											
Congenital Debility, Icterus, and Sclerema 151	4											
Suicide by Hanging or Strangulation 157											1	
Other Acute Poisonings 165												
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) 175						1					1	1
Effects of Heat 179												

Total deaths, 98. Death-rate, 12.74.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
							1									1									1		
								1		1															1		
							1	1		2															2		
1		1					3	4		7														5	2		
				1			1			1														1			
2		1	2				4	1		5														3		2	
1							1			1														1			
1							1	2		3															2	1	
1							1			1															1		
	1		2				4	2		5									1	1				3	1	2	
1		1					2			1				1										2			
	1	4	6	3			4	11		8	2		2	3										7	2	6	
1		1	1	1			1	3		4														2	1	1	
								1		1														1			
				1			1	3		4															3	1	
				1			1			1																1	
		1	1				3	3		6														3	1	2	
							1			1															1		
							1	1		2															2		
								2		2														1	1		
							2	1		3															3		
		1	1	1			1	2		2	1															2	
								1		1															1		
								1		1															1		
		1	3	1			5	3		5	1			1		1								3	2	3	
								1							1									1			
								1		1														1			
							1	2		3															3		
							2	2		4															4		
							1							1										1			
1								1		1	1													1			
	1						3	1		4														3	1		
						1	1			1																1	

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TABLE 15.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN EAST ORANGE.	AGE PERIODS.												
	Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-five to thirty	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1							1					
Scarlet Fever 7					1							
Whooping Cough 8	1	2		3								
Diphtheria and Croup 9			3									
Influenza 10												
Purulent Infection and Septichæmia 20				1								
Tuberculosis of the Lungs 28			1		1	1	5	5	4	5	4	2
Acute Miliary Tuberculosis 29							1					
Tuberculous Meningitis 30		2	4									
Abdominal Tuberculosis 31					1				1			
Cancer and Other Malignant Tumors of the Stomach, Liver 40											1	
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum 41												
Cancer and Other Malignant Tumors of the Female Genital Organs 42										1		1
Cancer and Other Malignant Tumors of the Breast 43										1		1
Cancer and Other Malignant Tumors of Other Organs or of Organs not specified 45												
Diabetes 50												
Anæmia, Chlorosis 54			1									
Simple Meningitis 61		2										
Including Cerebrospinal Fever 61A		1										
Other Diseases of the Spinal Cord 63												
Cerebral Hæmorrhage, Apoplexy 64	1										2	2
Paralysis Without Specified Cause 66												
Epilepsy 69											1	
Convulsions of Infants 71	1	1	1									
Acute Endocarditis 78			1		2				1			2
Organic Diseases of the Heart 79								2		2		1
Angina Pectoris 80												
Diseases of the Arteries, Atheroma, Aneurysm, etc. 81												
Diseases of the Veins (varices, hæmorrhoids, phlebitis, etc.) 83												
Diseases of the Lymphatic System (lymphangitis, etc.) 84				1								
Acute Bronchitis 89	1											
Chronic Bronchitis 90			1									
Bronchopneumonia 91		3	3									
Pneumonia 92			2			1			2			2
Pleurisy 93									1			
Pulmonary Congestion, Pulmonary Apoplexy 94			2									
Other Diseases of the Stomach (cancer excepted) 103	1		1									
Diarrhœa and Enteritis (under 2 years) 104		2	2									
Diarrhœa and Enteritis (2 years and over) 105			1	1			1					
Hernias, Intestinal Obstructions 109												
Other Diseases of the Intestines 110												
Cirrhosis of the Liver 113												
Other Diseases of the Liver 115					1							
Bright's Disease 120									1		2	2
Diseases of the Bladder 124												
Uterine Tumor (noncancerous) 129												
Puerperal Albuminuria and Convulsions 138							1			1		
Congenital Debility, Icterus, and Sclerema 151	9											
Other Diseases Peculiar to Early Infancy 152	3											
Lack of Care 153	1											
Senility 154												
Suicide by Poison 155								1				

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
							1			1															1	
								1		1															1	
							2	4		6															3	
							2	1		3															2	
1							1			1																
							1			1														1		
							1			1															1	
3	1	1	1				19	15	3	27	2		2	1		1		1					20	13	1	
								1		1															1	
							3	3		6															6	
								3		2															2	
1	2	2	3	1			4	6		8				1				1						6	1	3	
1		1	3	1			2	4	1	4						2								1	2	3	
		1	1					4		2			1	1										3	1		
		3	1	2				8		6			1	1										4	1	3	
				1			1			1															1		
		2	1					3		3														1		2	
		1					1	1		1						1									1	1	
							2			2															2	
								1		1															1	
	1							1		1														1		
1	1	11	6	2			11	16		23	1			2						1				19	2	6	
		2		1				3		3															1	2	
								1		1															1		
							1	2		3															2		
	1	3	5	4			14	5		15				2								2		9	4	6	
4	1	5	4	6			12	13	1	18	1		3	1	1							1		12	3	10	
			1					1		1														1			
		2	5	3			2	13	1	11	1		1	2										4	4	7	
			1					1					1													1	
								1		1															1		
							1			1															1		
							1		1	1															1		
		1	3				5	5	1	9												1		1	6	3	
2		5	5	5			6	13	1	17	2		1	2	1							1		12	4	8	
		2		1			2	2		3			1											3	1		
1	2	4	4	1			9	5	2	9	1			3								1		6	2	6	
			1				2	1		2			1											1	2		
							4		1	4															4		
	1	1		1			2	4	1	5				1										1	4	1	
		1					1					1												1			
			2				2																			1	
	1							1		1			1	1										1		2	
								2		2				1											1		
							8	1	2	9			2	1	1									16	5	9	
							2	1		3			1	1										1		1	
							1			1														1			
			1	1	5		3	4		6														2			
							1			1															2		
			1					1		1															1		
			2	1			3			1															1		
				1			1	1		1				1										1		6	
2	6	7	6	2	2		14	16	2	26															1		

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TABLE 15.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN EAST ORANGE.	AGE PERIODS.												
	Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Suicide by Asphyxia 156	....	....	....	..	..	1	..	..	..	....	..	..
Suicide by Firearms 159	....	....	....	..	..	..	..	..	1	1	..	..
Absorption of Deleterious Gases (conflagration excepted) 163	....	....	....	..	..	..	..	..	..	....	..	1
Accidental Drowning 169	....	....	....	..	..	1	..	..	..	....	..	..
Traumatism by Fall 172	....	....	....	..	..	..	..	..	..	....	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) 175	....	....	....	..	..	..	..	..	..	....	..	..
Effects of Heat 179	1	....	....	..	..	..	..	..	..	....	..	..
Cause of Death Not Specified or Ill-defined...189	....	4	....	..	..	..	..	..	..	....	..	..

Total deaths, 335. Death-rate, 9.25.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911. —*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
								1		1														1		
	1						2	1		2		1											2			
			1																				1		1	
							1			1														1		
				1				1						1											1	
		1					1				1												1			
			1				2	1	1	2														2		

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TABLE 16.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ELIZABETH.		AGE PERIODS.													
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty--twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1	..	..	..	..	..	..	..	2	1	..	1	1
Malaria	4	..	..	1	..	..	..	..	..	..	..	..	..
Measles	6	..	2	5	1	..	..	..	..	..	..	..	..
Scarlet Fever	7	..	1	8	3	..	1	1	..	..	..	..	..
Whooping Cough	8	..	5	7	1	..	..	..	..	..	..	..	..
Diphtheria and Croup	9	..	3	8	4	..	..	..	..	..	..	..	..
Including Croup	9A	..	..	1	..	..	..	..	..	..	..	..	..
Dysentery	14	..	1	..	..	..	..	..	..	..	..	..	..
Erysipelas	18	..	2	..	..	..	..	..	..	..	..	..	..
Purulent Infection and Septichæmia	20	1	..	..	..	..	..	..	..	..	1	..	1
Tetanus	24	2	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis of the Lungs	28	1	2	1	..	..	2	16	16	12	20	13	3
Acute Miliary Tuberculosis	29	..	..	..	..	..	..	..	1	..	1	..	..
Tuberculous Meningitis	30	..	5	2	2	..	..	..	..	..	..	..	..
Abdominal Tuberculosis	31	..	1	..	..	..	..	..	..	..	..	..	2
Tuberculosis of Other Organs	34	..	..	..	..	1	..	..	..	..	..	..	..
Disseminated Tuberculosis	35	..	..	..	..	..	..	1	..	..	..	..	..
Rickets	36	1	2	1	..	..	..	..	..	..	..	..	..
Syphilis	37	1	1	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Buccal Cavity	39	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	..	..	..	..	3	2
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum	41	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Female Genital Organs	42	..	..	..	..	..	..	..	..	..	1	..	2
Cancer and Other Malignant Tumors of the Breast	43	..	..	..	..	..	..	..	..	..	..	..	2
Cancer and Other Malignant Tumors of the Skin	44	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not specified	45	..	..	1	..	..	1	..	..	..	1	2	..
Acute Articular Rheumatism	47	..	..	1	1	..	..	..	..	..	1	..	..
Diabetes	50	..	..	..	..	..	..	..	..	..	..	..	2
Leuchæmia	53	..	..	..	..	..	..	1	..	..	..	..	..
Anæmia, Chlorosis	54	..	..	1	..	..	..	..	..	..	..	1	2
Other General Diseases	55	..	2	1	..	..	..	..	..	..	..	..	..
Alcoholism (acute or chronic)	56	..	..	..	..	..	..	..	1	2	2	..	1
Simple Meningitis	61	..	2	2	..	1	..	1	..	..	..	..	..
Including Cerebrospinal Fever	61A	..	2	1	..	..	..	2	..	..	..	..	..
Locomotor Ataxia	62	..	..	..	..	..	..	..	..	1	1	..	..
Other Diseases of the Spinal Cord	63	..	..	4	..	..	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	1	1	1	..	..	1	1	..	1	2	1	2
Softening of the Brain	65	..	..	..	..	..	..	..	..	..	..	..	..
Paralysis Without Specified Cause	66	..	..	..	..	..	..	..	..	..	..	1	..
General Paralysis of the Insane	67	..	..	..	..	..	..	..	..	..	..	..	..
Other Forms of Mental Alienation	68	..	..	..	..	..	..	..	..	..	..	..	..
Epilepsy	69	..	..	..	1	..	2	1	..	..	..	..	..
Convulsions of Infants	71	2	1	..	..	..	..	..	..	..	..	..	..
Pericarditis	77	..	..	..	..	..	..	..	..	..	..	..	1
Acute Endocarditis	78	1	..	2	2	4	..	3	2	3	4	1	10
Organic Diseases of the Heart	79	..	..	2	1	1	1	4	..	1	2	6	2
Angina Pectoris	80	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	..	..	..	..	..	..	..	..
Embolism and Thrombosis	82	..	1	..	..	..	..	..	..	..	..	..	..
Diseases of the Veins (varices, hæmorrhoids, phlebitis, etc.)	83	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Lymphatic System (lymphangitis, etc.)	84	..	..	..	..	..	..	..	..	..	1	..	..
Diseases of the Larynx	87	..	1	1	..	..	..	..	..	..	..	..	..
Acute Bronchitis	89	..	3	2	..	..	..	..	..	..	..	..	..

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AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	1	...	...	...	...	...	5	1	...	...	1	...	...	1	...	...	3	1	...	...	1	...	3	3	...	...
...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	4	4	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
...	...	...	...	...	...	...	7	7	...	14	...	...	...	...	...	...	...	...	...	...	...	...	1	13	...	...
...	...	...	...	...	...	...	6	7	...	13	...	...	...	...	...	...	...	...	...	...	...	...	...	13	...	...
...	...	...	...	...	...	...	7	8	...	15	...	...	...	...	...	...	...	...	...	...	...	...	...	15	...	...
...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	1	...	...	...	...	2	1	...	2	...	...	1	...	...	...	...	...	...	...	...	...	1	2	...	...
...	1	...	...	...	...	...	3	1	...	3	...	...	...	...	...	...	...	...	1	...	...	...	2	1	1	...
1	...	...	...	...	...	...	2	1	...	2	...	...	...	...	...	...	...	...	...	...	1	...	1	2	...	...
2	1	5	...	...	...	...	67	27	6	60	3	1	6	7	2	2	4	...	6	...	4	...	44	45	5	...
1	...	...	...	...	...	...	3	...	...	2	...	...	...	...	...	...	1	...	...	...	...	...	2	...	1	...
...	...	...	...	...	...	...	8	1	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	9	...	...
...	...	...	...	...	...	...	2	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...
...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	2	2	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...
...	...	...	...	...	...	...	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	1	1	...	...	...	1	1	...	...	...	...	...	2	...	...	...	...	...	...	...	...	1	...	1	...
2	8	7	1	1	...	...	16	9	1	10	1	...	8	4	...	1	1	...	...	...	...	...	18	3	4	...
...	1	5	1	...	...	...	4	3	...	4	...	...	2	...	...	...	1	...	...	...	...	...	5	1	1	...
3	...	...	2	...	...	...	8	...	...	6	...	...	2	...	...	...	...	...	...	...	...	...	5	...	3	...
...	1	1	...	2	...	...	1	5	...	4	1	...	1	...	...	...	...	...	...	...	...	...	1	1	4	...
...	...	...	2	...	...	...	1	1	...	...	...	...	2	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	2	...	...	...	...	4	3	...	2	...	...	...	1	1	...	1	...	...	...	1	...	4	2	1	...
...	...	...	...	...	...	...	1	2	...	3	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...
...	2	3	2	...	...	...	4	5	...	5	...	...	...	4	...	...	...	...	...	...	...	...	3	1	5	...
1	...	...	...	...	...	...	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	1	...	...	...	...	...	2	3	...	1	1	...	2	1	...	...	...	...	...	...	...	...	3	1	1	...
...	...	...	...	...	...	...	2	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
1	...	1	...	...	...	...	3	1	1	6	...	...	...	1	...	...	...	1	...	...	...	1	2	4	2	1
...	...	...	...	...	...	...	4	2	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...
...	...	...	...	...	...	...	5	1	...	4	...	...	...	...	...	...	...	...	2	...	...	...	...	6	...	...
...	...	...	...	...	...	...	2	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1
...	...	...	1	...	...	...	2	1	...	5	...	...	...	...	...	...	...	...	...	...	...	...	1	4	...	...
7	9	16	19	4	...	...	27	40	3	36	2	...	18	8	...	...	...	...	1	...	1	1	34	9	24	...
...	...	1	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...
...	...	1	1	2	...	...	3	2	...	3	...	...	1	...	...	...	...	...	1	...	...	...	3	...	2	...
...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	3	3	...	...	...	3	3	...	3	...	...	1	1	...	...	...	...	...	...	1	...	4	...	2	...
...	...	...	...	...	...	...	2	2	...	3	...	...	...	...	...	1	...	...	...	...	...	...	...	4	...	...
...	...	...	...	...	...	...	2	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
...	...	...	...	1	...	...	1	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
4	6	17	16	5	1	...	40	41	2	41	...	1	9	19	1	2	2	1	...	...	4	1	35	17	29	...
1	1	7	5	6	...	...	25	17	4	24	...	...	4	5	...	1	2	1	...	1	4	...	16	14	11	1
...	...	2	...	...	...	...	2	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	3	5	2	...	...	6	4	1	6	1	...	1	1	...	...	...	...	...	...	1	...	4	...	6	...
...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
1	1	...	...	...	...	...	...	2	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	2	1	1	...	5	4	1	7	1	...	...	1	...	...	...	...	...	...	...	...	1	5	3	...

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TABLE 16.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ELIZABETH.		AGE PERIODS.												
		Under one month	Under 1 yr. "not including under 1 mo."	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty--twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Bronchopneumonia	91	1	16	7	..	2	..	1	3	4	2	1	3
Pneumonia	92	3	14	14	..	1	2	1	1	5	6	4	3
Pleurisy	93	..	..	2	..	..	..	..	..	..	1	..	..
Pulmonary Congestion, Pulmonary Apoplexy	94	..	..	1	1	..	..	..	..	1	..	1	1
Gangrene of the Lung	95	..	..	1	..	..	..	..	..	..	..	..	..
Asthma	96	..	..	..	..	..	..	..	..	1	..	..	..
Other Diseases of the Respiratory System (tuberculosis excepted)	98	..	..	..	..	..	..	..	2	..	..	1	..
Diseases of the Pharynx	100	..	..	..	..	..	1	..	..	..	..	..	..
Ulcer of the Stomach	102	..	..	..	..	..	..	..	..	..	..	..	1
Other Diseases of the Stomach (cancer excepted)	103	1	5	2	..	..	..	..	..	..	..	1	..
Diarrhœa and Enteritis (under 2 years)	104	5	85	21	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	..	..	4	..	..	..	1	1	..	..	..	..
Appendicitis and Typhlitis	108	..	..	..	..	..	1	..	2	1	..	..	..
Hernias, Intestinal Obstructions	109	..	1	..	..	..	..	..	1	..	1	..	1
Other Diseases of the Intestines	110	..	..	..	..	..	..	..	..	1	1	..	..
Cirrhosis of the Liver	113	..	..	..	..	..	..	..	2	..	2	1	1
Other Diseases of the Liver	115	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Spleen	116	..	..	..	..	..	..	..	..	..	..	..	..
Simple Peritonitis (nonpuerperal)	117	..	1	..	..	1	..	..	1	..	..	..	..
Other Diseases of the Digestive System (cancer and tuberculosis excepted)	118	..	..	..	..	..	..	..	..	..	..	..	..
Acute Nephritis	119	..	..	..	..	..	..	..	..	1	..	..	..
Bright's Disease	120	..	..	3	..	..	2	3	3	4	5	2	4
Other Diseases of the Kidneys and Annexa	122	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Bladder	124	..	..	..	..	..	..	..	..	..	..	..	1
Cysts and Other Tumors of the Ovary	131	..	..	..	..	..	..	..	..	..	1	..	..
Accidents of Pregnancy	134	..	..	..	..	..	1	3	3	..	..	..	..
Puerperal Hæmorrhage	135	..	..	..	..	..	..	1	..	1	..	..	..
Other Accidents of Labor	136	..	..	..	..	..	..	..	1	1	..	..	..
Puerperal Septichæmia	137	..	..	..	..	..	1	1	2	2	1	..	..
Puerperal Albuminuria and Convulsions	138	..	..	..	..	..	1	3	..	..	1	..	..
Puerperal Phlegmasia Alba Dolens, Embolus, Sudden Death	139	..	..	..	..	..	..	1	..	..	..	..	..
Other Diseases of the Skin and Annexa	145	..	2	..	..	..	..	..	..	..	..	..	..
Diseases of the Bones (tuberculosis excepted)	146	..	..	..	..	..	..	1	..	..	..	..	..
Congenital Malformations (stillbirths not included)	150	3	..	..	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	62	2	..	..	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	6	3	..	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Poison	155	..	..	..	..	..	..	1	1	1	..	..	..
Suicide by Asphyxia	156	..	..	..	..	..	..	..	..	1	1	..	2
Suicide by Hanging or Strangulation	157	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Firearms	159	..	..	..	..	..	..	1	..	..	2	..	..
Suicide by Cutting or Piercing Instruments	160	..	..	..	..	..	..	..	..	1	..	1	..
Other Suicides	163	..	..	..	..	..	..	..	..	1	..	..	..
Other Acute Poisonings	165	1	..	2	..	..	..	..	..	..	..	..	..
Burns (conflagration excepted)	167	..	..	4	4	..	..	1	..	1	..	1	1
Absorption of Deleterious Gases (conflagration excepted)	168	..	..	..	..	..	1	1	1	..	..	..	1
Accidental Drowning	169	..	..	..	1	..	..	..	1	..	..	1	..
Traumatism by Fall	172	1	..	..	..	..	..	2	1	1	..	..	..
Traumatism by Other Crushing (vehicles railroad, landslides, etc.)	175	..	..	..	5	..	3	6	5	3	5	3	7
Excessive Cold	178	1	..	..	..	..	..	..	..	..	..	..	..
Effects of Heat	179	..	..	..	..	..	1	..	1	..	1	1	2
Electricity (lightning excepted)	181	..	..	..	..	..	..	..	..	1	..	..	..
Homicide by Firearms	182	..	..	..	..	..	..	..	1	..	..	..	..
Cause of Death Not Specified or Ill-defined	189	3	24	5	..	..	..	..	..	..	..	..	..

Total deaths, 1,202. Death-rate, 15.32.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
3	2	4	6	5	..	..	39	21	1	36	1	..	3	5	..	2	4	1	3	..	..	..	18	25	12	..
4	4	15	11	2	..	..	49	41	6	59	2	..	9	7	2	1	3	1	4	..	..	2	30	44	16	..
..	..	..	..	..	..	..	2	1	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
1	..	7	5	3	..	..	9	12	3	12	..	..	2	5	..	1	..	..	..	..	1	..	3	2	10	..
..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..
1	1	..	..	..	..	..	4	1	..	2	..	..	..	2	..	..	..	..	1	..	..	..	4	1	..	..
..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..
..	1	2	..	..	..	..	2	2	..	2	..	..	..	1	..	..	..	..	..	..	..	1	..	2	..	2	..
..	..	..	1	..	..	..	5	5	1	7	..	..	..	..	..	..	..	..	2	..	..	..	1	..	9	1	..
..	..	..	..	..	..	..	60	51	3	106	1	..	..	..	..	..	1	1	1	..	1	..	..	111	..	..
..	..	1	3	..	..	..	7	3	..	5	..	..	1	3	..	..	..	..	..	..	1	..	2	6	2	..
1	1	..	..	..	..	..	4	2	..	4	..	..	1	..	..	1	..	..	..	..	..	..	5	1	..	..
..	..	2	..	..	..	..	5	1	..	4	..	..	..	1	..	1	..	..	..	..	..	..	4	2	..	..
..	..	..	..	..	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
2	1	1	1	..	..	..	5	6	..	5	..	..	3	..	..	..	1	..	1	..	1	..	3	1	2	..
..	..	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
1	..	..	..	..	..	..	2	2	..	3	..	..	..	..	1	..	..	..	..	..	..	..	2	2	..	..
..	..	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
8	6	10	5	1	..	..	36	20	3	36	1	..	4	7	3	1	1	1	..	..	1	1	28	17	11	..
..	..	..	1	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	1	1	1	..	..	3	3	..	..	..	..	3	1	..	..	..	..	..	..	..	..	3	..	1	..
..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	..	..	..	..	6	..	3	..	..	..	..	..	..	..	2	..	..	..	1	6	..	..	..
..	..	..	..	..	..	..	..	2	1	1	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	..
..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..
..	..	..	..	..	..	..	..	7	..	5	..	..	..	..	..	..	1	..	1	..	..	..	7	..	..	..
..	..	..	..	..	..	..	..	5	..	3	..	..	..	..	1	..	..	..	..	..	1	..	4	1	..	..
..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	1	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	..	..	..	..	..	..	39	25	1	64	..	..	..	..	..	..	..	..	..	..	..	..	..	64	..	..
..	..	..	..	..	..	..	7	2	..	9	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..	..
..	..	1	1	3	1	..	4	7	..	1	1	..	3	6	..	..	..	..	..	..	..	..	1	..	11	..
1	..	..	..	..	..	..	3	1	..	3	..	..	1	..	..	..	..	..	..	..	..	..	3	2	..	..
..	..	..	..	..	..	..	2	2	..	1	..	..	..	..	..	..	2	..	1	..	..	..	4	..	..	..
1	..	1	..	..	..	..	2	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..
1	..	..	..	..	..	..	3	1	..	4	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..
..	..	..	..	..	..	..	2	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	1	1	..	..
..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	1	2	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
2	1	..	..	..	..	..	6	10	..	11	..	..	..	2	1	..	..	..	..	..	..	1	..	4	9	2	..
2	..	..	..	..	..	..	3	3	..	2	..	..	..	1	2	..	..	..	..	..	..	1	..	4	1	1	..
1	..	1	..	..	..	..	5	..	..	1	..	..	1	2	..	..	..	..	..	..	..	..	1	..	3	1	1
1	1	..	..	..	..	..	6	1	1	3	..	..	1	..	1	..	1	..	1	..	1	..	..	4	3	..	..
..	3	4	1	..	..	..	42	3	1	20	..	..	4	4	3	..	3	1	2	..	2	6	19	17	3	6
..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..
1	1	3	..	..	..	..	9	2	..	..	..	..	1	2	..	..	3	1	..	..	..	4	3	1	4	3
..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	1	21	12	..	22	..	..	1	..	..	..	..	..	..	..	..	..	..	22	1	..

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TABLE 17.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ENGLEWOOD.	AGE PERIODS.												
	Under one month	Under 1 yr. "not including under 1 mo."	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1						1			1			
Measles 6		1										
Scarlet Fever 7				1								
Dysentery 14		1										
Rabies 23								1				
Tuberculosis of the Lungs 28							2	1	2	2	1	
Tuberculous Meningitis 30				1								
Disseminated Tuberculosis 35			1									
Cancer and Other Malignant Tumors of the Stomach, Liver 40												
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified 45												
Diabetes 50			1									
Anæmia, Chlorosis 54												
Other General Diseases 55			1									
Cerebral Hæmorrhage, Apoplexy 64								1				1
Epilepsy 69								1				
Pericarditis 77								1				
Acute Endocarditis 78							1		1			
Organic Diseases of the Heart 79				2							1	1
Angina Pectoris 80												1
Embolism and Thrombosis 82												
Bronchopneumonia 91		1										
Pneumonia 92		1			1		1			1	2	2
Pleurisy 93								1		1	1	
Pulmonary Congestion, Pulmonary Apoplexy 94										1	1	
Asthma 96									1			
Diseases of the Pharynx 100			1									
Other Diseases of the Stomach (cancer excepted) 103		1										
Diarrhœa and Enteritis (under 2 years) 104		3	1									
Diarrhœa and Enteritis (2 years and over) 105								1				
Appendicitis and Typhlitis 108				1				1		2		
Hernias, Intestinal Obstructions 109						1						
Other Diseases of the Intestines 110												
Other Diseases of the Digestive System (cancer and tuberculosis excepted) 118												
Bright's Disease 120		1							2		1	
Cysts and Other Tumors of the Ovary 131												
Other Accidents of Labor 136									1			
Following Childbirth (not otherwise defined) 140									1			
Congenital Debility, Icterus, and Sclerema 151		1										
Senility 154										1		
Suicide by Hanging or Strangulation 157												
Suicide by Firearms 159						1		1				
Other Acute Poisonings 165				1								
Burns (conflagration excepted) 167			1	2								
Traumatism by Fall 172							1					
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) 175			1				1	1				
Injuries by Animals 176												
Homicide by Firearms 182						1						
Ill-defined Organic Disease 187												
Cause of Death Not Specified or Ill-defined 189		2										

Total deaths, 140. Death-rate, 13.56.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	1	1	.....	1	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...
1	1	1	...	...	...	...	6	5	4	8	1	...	...	1	...	1	...	...	...	...	...	...	...	6	4	1	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	1	2	...	1	...	...	2	2	.....	...	1	...	1	1	...	...	...	...	...	...	...	1	...	1	...	2	...
...	...	...	2	...	...	...	1	1	.....	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	1	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	1	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	2	2	2	...	...	...	3	5	1	4	1	...	1	2	...	...	...	...	...	...	...	...	...	7	...	1	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	2	.....	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
1	1	1	1	...	...	...	4	3	.....	5	...	...	...	2	...	...	...	...	1	...	...	...	...	4	3	1	...
1	...	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
...	...	1	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	1	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
...	1	6	4	2	1	..	14	9	1	16	1	..	2	3	1	..	..	..	..	..	..	..	..	10	3	10	...
...	...	...	...	...	...	...	2	1	.....	1	1	...	...	1	...	...	...	...	...	...	...	...	...	3	...	...	...
...	...	2	1	...	...	...	3	2	1	2	...	...	1	2	...	...	...	...	...	...	...	...	...	4	...	1	...
...	...	...	...	...	...	...	...	1	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	1	...	1	...	...	2	1	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...
...	...	...	...	...	...	...	3	1	.....	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...
1	...	...	...	...	...	...	...	2	.....	1	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...
...	...	...	...	...	...	...	3	1	.....	3	...	...	...	...	...	1	...	...	...	...	...	...	...	1	3	...	...
...	...	1	...	...	...	...	2	...	.....	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	...
1	...	...	...	...	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	1	...	...	...	...	1	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...
...	1	1	...	...	...	...	3	3	1	5	...	...	...	...	...	1	...	...	...	...	...	...	...	3	2	1	...
...	...	1	...	...	...	...	...	1	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	1	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	1	1	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
...	...	...	...	...	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	1	.....	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	...	...
...	...	1	...	...	...	...	1	1	.....	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...
...	...	...	...	1	...	...	2	2	.....	2	1	...	...	...	...	1	...	...	...	...	...	...	...	...	3	1	...
2	2	...	...	...	...	...	4	1	.....	1	...	...	...	...	1	2	...	...	...	...	...	1	...	2	1	1	1
...	1	...	...	...	...	...	3	1	.....	2	...	...	...	1	1	...	...	...	...	...	...	...	...	2	2	...	...
1	...	...	...	...	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	1	...	...	...	1	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	2	3	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2	...	2

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TABLE 18.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN GARFIELD.		AGE PERIODS.												
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Malaria	4	....	1	....	..	..	..	..	..	..	....	..	..
Measles	6	....	1	....	..	..	..	..	..	..	....	..	..
Scarlet Fever	7	....	1	4	2	..	1	..	..	..	....	..	..
Whooping Cough	8	....	1	....	..	..	..	..	..	..	....	..	..
Diphtheria and Croup	9	....	....	3	..	..	..	..	..	..	....	..	..
Erysipelas	18	....	....	....	..	..	..	..	..	..	1	..	..
Tetanus	24	....	....	....	1	..	..	..	..	..	....	..	..
Tuberculosis of the Lungs	28	....	....	....	1	..	..	1	1	4	....	1	..
Tuberculous Meningitis	30	....	....	....	1	..	..	..	..	..	....	1	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	....	....	....	..	..	..	..	..	..	..	..	1
Diabetes	50	....	....	....	..	..	..	..	..	1	....	..	..
Anæmia, Chlorosis	54	....	....	....	..	..	..	..	..	..	....	1	..
Other General Diseases	55	....	1	....	1	..	..	..	..	..	....	..	..
Alcoholism (acute or chronic)	56	....	....	....	..	..	..	..	..	1	....	..	..
Including Cerebrospinal Fever	61A	....	....	1	..	..	..	..	..	..	....	..	..
Cerebral Hæmorrhage, Apoplexy	64	....	....	....	..	..	..	..	..	..	....	..	..
Paralysis Without Specified Cause	66	....	....	....	..	..	..	..	..	..	....	..	..
Convulsions of Infants	71	1	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Ears	76	....	....	....	..	..	..	..	..	..	....	..	..
Acute Endocarditis	78	....	....	....	..	..	..	..	..	..	1	2	..
Organic Diseases of the Heart	79	....	....	....	..	..	..	..	..	..	....	2	..
Acute Bronchitis	89	....	1	....	..	..	..	..	..	..	....	..	..
Chronic Bronchitis	90	....	....	....	..	..	..	..	1	..	....	..	..
Bronchopneumonia	91	2	3	1	1	..	..	..	..	..	....	..	..
Pneumonia	92	1	6	2	..	..	..	..	..	..	1	..	..
Pleurisy	93	....	....	1	..	..	..	..	..	..	....	..	..
Other Diseases of the Respiratory System (tuberculosis excepted)	98	....	....	....	..	..	..	..	..	..	1	..	..
Other Diseases of the Stomach (cancer excepted)	103	....	1	....	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (under 2 years)	104	1	19	....	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (2 years and over)	105	....	....	....	..	..	..	1	..	..	....	..	..
Acute Nephritis	119	....	....	....	..	..	..	..	..	..	....	..	..
Bright's Disease	120	....	....	2	..	..	1	..	..	1	....	..	..
Diseases of the Prostate	126	....	....	....	..	..	..	..	..	..	....	..	..
Puerperal Hæmorrhage	135	....	....	....	..	..	..	..	..	..	1	..	..
Congenital Debility, Icterus, and Sclerema	151	10	....	....	..	..	..	..	..	..	....	..	..
Other Diseases Peculiar to Early Infancy	152	1	1	....	..	..	..	..	..	..	....	..	..
Suicide by Asphyxia	156	....	....	....	..	..	..	..	..	..	....	1	..
Burns (conflagration excepted)	167	....	....	....	2	..	..	..	..	..	....	..	..
Accidental Drowning	169	....	....	....	..	..	..	1	..	..	....	..	..
Traumatism by Fall	172	....	....	....	..	..	..	..	..	..	....	..	..
Effects of Heat	179	....	....	....	..	..	..	..	..	..	....	..	..
Cause of Death Not Specified or Ill-defined	189	1	4	1	1	..	..	..	..	..	....	..	..

Total deaths, 186. Death-rate, 12.10.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
							1			1													1		
							1			1													1		
							6	3		7				1									8		
							1			1													1		
							3			3													3		
								1									1						1		
								1		1														1	
	2			1			6	5					2				6		1		2		7	2	2
							1	1		1				1									1	1	
1		2					1	3						1	1		2						3		1
								1		1													1		
							1			1							1						1		
1							1	2		1							1		1				1	2	
		1					2			1							1							1	1
								1		1														1	
2	1			2			1	4		1					2		1	1					3		2
				1				1													1		1		
								1		1														1	
				1			1			1													1		
		1					3	1		1							1	1			1		4	1	
	1	1					2	2		1			2				1						3	1	
							1			1													1		
							1			1				1										1	
1		1					5	2		7													1	2	2
							1	1		1					1		1		1					1	1
								1					1												
							1			1														1	
							10	10		20								1						20	
							1																	1	
		1					1								1								1		
		1					1	4		3					2								3		
		1					1			1								1					1	10	
								1																	
							5	5		10														2	
							2			2													1		
							1															1		2	1
		1						3		2								1						1	
							1											1							1
		1						1							1										
		1						1							1										
							5	2		6												1		7	

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TABLE 19.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN GLOUCESTER CITY.		AGE PERIODS.												
		Under one month.	Under 1 yr "not including under 1 mo"	One to five.	Five to ten.	Ten to fifteen.	Fifteen to twenty.	Twenty to twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty.	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1			2					2				
Measles	6			1									
Scarlet Fever	7			1									
Diphtheria and Croup	9			1				1					
Dysentery	14			1									
Other Epidemic Diseases	19		1										
Tuberculosis of the Lungs	28							2	3	3	3	1	1
Tuberculous Meningitis	30				1								
Tuberculosis of Other Organs	34						1						
Disseminated Tuberculosis	35												1
Cancer and Other Malignant Tumors of the Buccal Cavity	39												
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum	41												
Cancer and Other Malignant Tumors of the Female Genital Organs	42			1									
Cancer and Other Malignant Tumors of the Breast	43											1	
Acute Articular Rheumatism	47										1		
Chronic Rheumatism and Gout	48												
Diabetes	50						1			1			
Other General Diseases	55									1			
Other Diseases of the Spinal Cord	63			1									
Cerebral Hæmorrhage, Apoplexy	64											1	
Paralysis Without Specified Cause	66											1	
Epilepsy	69							1					
Convulsions of Infants	71	1	3										
Acute Endocarditis	78												
Organic Diseases of the Heart	79												
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81												
Acute Bronchitis	89		1										
Chronic Bronchitis	90												
Bronchopneumonia	91			1									
Pneumonia	92	1	4	1							1		
Pulmonary Congestion, Pulmonary Apoplexy	94												
Other Diseases of the Stomach (cancer excepted)	103												1
Diarrhœa and Enteritis (under 2 years)	104	1	4	1									
Hernias, Intestinal Obstructions	109												
Other Diseases of the Intestines	110												
Cirrhosis of the Liver	113												1
Other Diseases of the Liver	115												
Bright's Disease	120		1								1		1
Calculi of the Urinary Passages	123									1			
Accidents of Pregnancy	134						1						
Other Accidents of Labor	136									1			
Puerperal Albuminuria and Convulsions	138										1		
Congenital Malformation (stillbirths not included)	150	2											
Congenital Debility, Icterus, and Sclerema	151	4											
Suicide by Hanging or Strangulation	157							1					
Conflagration	166		1										
Absorption of Deleterious Gases (conflagration excepted)	168												
Accidental Drowning	169								1			1	
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.	175				1							1	
Electricity (lightning excepted)	181									1			
Cause of Death Not Specified or Ill-defined	189		2										

Total deaths, 131. Death-rate, 13.45.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.						SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
1							3	2		4	1												1	3	1	
								1		1														1		
								1		1														1		
							1	1		2													1	1		
							1			1														1		
								1		1														1		
3			1				3	2		13													10	3	2	
							1			1														1		
							1			1														1		
								1					1										1			
			1					1						1											1	
	1							1		1	1												1			
								1		1														1		
								1		1													1			
							1			1	1															
1								1		1															1	
		1	1				1	3		3			1										3	1		
								1		1													1			
							1			1														1		
	3	3	4	2			4	9		8				3		1	1						6		7	
			2				2	1		3													3			
							1			1														1		
							1	3		4														4		
1			1				1	1		1			1										1		1	
		2			1		1	1		1			1										1		1	
	1	2					3	1		2			1	1									3	1		
								1		1														1		
	1						1			1													1			
		1	1				2	1		3				1									1	1	1	
		1	1				5	4		3				1									3	6		
			1	1				2		2															2	
			1				1	1		2													1		1	
							5	1		6														6		
		2						2		1				1									2			
					1		1						1												1	
							1							1									1			
			1				1							1									1			
1	2	3	1				4	6	1	7		1	1	1									5	2	3	
							1			1														1		
							1			1													1			
								1		1													1			
								1		1													1			
							1	1		2														2		
							2	1		4														4		
							1			1														1		
								1		1														1		
					1			1		1															1	
							1	1		1				1										1	1	
							1	1		1												1		1		1
							1		1	1													1			
							1	1		2														2		

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TABLE 20.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN GUTTENBERG.	AGE PERIODS.												
	Under one month.	Under 1 year "not including under one month"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1	....	....	1	..	..	1	..	..	..	....	..	..
Measles 6	....	1	....	..	..	..	..	..	..	....	..	..
Scarlet Fever 7	....	....	1	1	..	..	..	..	..	....	..	..
Whooping Cough 8	....	1	....	..	..	..	..	..	..	....	..	..
Diphtheria and Croup 9	....	1	3	1	..	..	..	..	..	....	..	..
Including Croup 9A	....	1	....	..	..	..	..	..	..	....	..	..
Tuberculosis of the Lungs 28	....	....	....	..	..	..	..	1	1	1	..	..
Acute Miliary Tuberculosis 29	....	....	1	..	..	..	..	..	..	....	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver 40	....	....	....	..	..	..	..	..	..	....	..	..
Cancer and Other Malignant Tumors of the Female Genital Organs 42	....	....	....	..	..	..	..	..	..	....	..	..
Other Tumors (tumors of the female genital organs excepted) 46	....	....	....	..	..	..	..	..	..	....	..	..
Acute Articular Rheumatism 47	....	....	....	1	..	..	..	..	..	....	..	..
Diabetes 50	....	....	....	..	..	..	..	..	..	....	..	..
Alcoholism (acute or chronic) 56	....	....	....	..	..	..	..	..	..	....	..	1
Paralysis Without Specified Cause 66	....	....	....	..	..	..	..	..	..	....	..	..
Acute Endocarditis 78	....	....	....	..	..	..	..	..	..	1	..	..
Organic Diseases of the Heart 79	....	....	....	..	1	..	..	..	..	....	..	..
Angina Pectoris 89	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc. 81	....	....	....	..	..	..	..	..	..	....	..	..
Acute Bronchitis 89	....	1	....	..	..	..	..	..	..	....	..	..
Chronic Bronchitis 90	....	....	....	..	..	..	..	..	..	....	..	..
Bronchopneumonia 91	....	1	1	..	..	..	..	..	..	....	..	..
Pneumonia 92	....	5	1	1	..	..	..	..	..	....	..	..
Other Diseases of the Stomach (cancer excepted) 103	....	1	....	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (under 2 years) 104	....	8	1	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (2 years and over) 105	....	....	2	..	..	..	..	..	..	....	..	..
Simple Peritonitis (nonpuerperal) 117	....	....	....	..	..	..	..	..	..	....	..	1
Bright's Disease 120	....	....	....	..	..	..	1	..	..	....	1	..
Congenital Debility, Icterus, and Sclerema 151	2	....	....	..	..	..	..	..	..	....	..	..
Accidental Drowning 169	....	....	1	..	..	..	..	..	..	....	..	..
Traumatism by Fall 172	....	....	....	..	..	..	..	..	..	....	..	..

Total deaths, 77. Death-rate, 12.13.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	...	2	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
...	...	...	...	...	...	...	...	2	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	....	2	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
...	...	...	...	...	...	...	3	2	.....	5	...	...	...	...	...	...	...	...	...	...	...	...	....	5	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
1	...	...	...	...	...	...	3	2	.....	3	...	...	...	1	...	...	1	...	...	...	...	...	4	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
...	1	2	...	...	...	...	...	3	.....	1	1	...	...	...	...	...	...	1	...	...	...	...	1	1	1	...
...	...	1	...	...	...	...	...	1	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	1	....	...	...
...	...	...	1	...	...	...	...	1	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	....	....	1	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
...	...	1	...	...	...	...	...	1	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	1	....	...	...
...	...	...	1	...	...	...	1	...	.....	...	...	...	...	1	1	...	...	...	...	...	...	...	1	....	...	...
...	...	...	...	1	...	...	2	...	.....	...	...	...	2	...	...	...	...	...	...	...	...	...	1	....	1	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
...	...	1	...	...	...	...	1	...	.....	1	...	...	...	...	1	...	...	...	...	...	...	...	1	....	...	...
...	...	...	1	...	...	...	1	1	.....	1	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...
...	...	...	...	1	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	....	....	1	...
1	...	1	...	...	...	...	...	4	.....	2	...	...	2	...	...	...	...	...	...	...	...	...	2	2	...	...
1	...	2	...	...	...	...	4	7	.....	3	...	...	...	3	...	...	...	...	...	...	...	...	4	7	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
...	...	...	...	...	...	...	8	1	.....	9	...	...	...	...	...	...	...	...	...	...	...	...	....	9	...	...
...	...	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	....	2	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	....	...	...
...	1	5	2	1	...	...	5	6	.....	3	...	1	4	3	...	...	...	...	...	...	...	...	1	2	8	...
...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	....	2	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
1	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	....	...	...

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TABLE 21.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN HACKENSACK		AGE PERIODS.										
		Under one month	Under 1 year "not including under one month	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Typhoid Fever	1										1
Measles	6		4	8	1			1			
Scarlet Fever	7									1	
Whooping Cough	8		1								
Diphtheria and Croup	9				2						
Tuberculosis of the Lungs	28							5	5	4	2
Tuberculous Meningitis	30		1		1						
Syphilis	37										
Gonococcus Infection	38			1							
Cancer and Other Malignant Tumors of the Stomach, Liver	40										
Cancer and Other Malignant Tumors of the Peritoneum, Intestines, Rectum.	41										
Cancer and Other Malignant Tumors of the Female Genital Organs	42										
Cancer and Other Malignant Tumors of the Breast	43										
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified.	45										
Acute Articular Rheumatism	47										
Diabetes	50										
Addison's Disease	52								1		
Leuchæmia	53										
Alcoholism (acute or chronic)	56										
Simple Meningitis	61		1		1						
Other Diseases of the Spinal Cord	63				1	1					
Cerebral Hæmorrhage, Apoplexy	64										
Paralysis Without Specified Cause	66										
Convulsions of Infants	71	1	1								
Pericarditis	77			1							
Acute Endocarditis	78										
Organic Diseases of the Heart	79	1					1		1		1
Angina Pectoris	80										
Embolism and Thrombosis	82							1			
Bronchopneumonia	91		6								
Pneumonia	92		1	1			1	2			2
Pleurisy	93			1							1
Pulmonary Congestion, Pulmonary Apoplexy	94						1		1		
Asthma	96										
Other Diseases of the Stomach (cancer excepted)	103										
Diarrhœa and Enteritis (under 2 years)	104	1	10	8							
Appendicitis and Typhlitis	108						1		1		1
Hernias, Intestinal Obstructions	109										
Other Diseases of the Intestines	110										
Cirrhosis of the Liver	113										
Other Diseases of the Liver	115										
Acute Nephritis	119				1						
Bright's Disease	120										1
Calculi of the Urinary Passages	123										
Puerperal Hæmorrhage	135								1		
Other Accidents of Labor	136										1
Puerperal Septichæmia	137									1	
Gangrene	142										
Other Diseases of the Skin and Annexa	145										
Diseases of the Bones (tuberculosis excepted)	146										
Congenital Malformation (stillbirths not included)	150	1									
Congenital Debility, Icterus, and Sclerema	151	9	1								
Senility	154										

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AGE PERIODS.									SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	1	..	..	..	..	..	..	..	2	.....	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
..	..	..	..	..	..	..	..	..	3	11	1	12	..	..	..	..	2	..	..	..	..	..	..	..	..	14	..	..
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	4	3	1	..	..	..	..	..	9	15	6	17	..	..	2	2	1	..	..	..	1	..	1	..	12	10	10	2
..	..	..	..	..	..	1	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	..	..	..	..	1	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	1	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	1	..	..	1	3	1	..	..	2	4	.....	3	1	..	1	1	..	..	..	..	..	..	..	..	1	1	4	..
..	..	..	..	..	2	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
..	..	..	..	1	..	..	..	..	..	1	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
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..	..	1	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	1	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	1	..	1	..	..	..	2	..	.....	1	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1
..	..	..	..	1	..	..	..	..	..	3	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..
..	..	2	1	6	2	..	..	..	2	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	..	..	1	..	..	..	..	..	7	4	.....	6	..	..	..	1	..	1	..	..	..	..	..	..	3	6	1	4
..	..	..	..	..	..	..	..	..	..	1	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	1	..	1	..	..	..	1	1	.....	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1	..
1	1	1	1	2	1	1	..	..	6	6	3	9	..	..	..	..	1	..	1	..	..	..	..	..	1	5	4	3	..
..	1	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	..	..	..	..	..	1	..	.....	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..
..	1	..	..	..	..	..	..	..	3	4	2	5	..	..	..	..	1	..	..	..	..	..	..	..	1	..	7	..	..
3	..	..	1	2	2	1	..	..	7	9	1	12	..	..	1	1	1	..	1	..	..	..	..	..	..	11	5	..	..
..	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
..	..	..	..	3	1	2	..	..	4	4	2	6	..	..	1	..	1	..	..	..	..	..	..	..	..	2	2	4	..
..	..	..	2	..	..	..	..	..	1	1	.....	..	..	..	..	1	..	..	1	..	..	..	..	..	..	1	..	1	..
..	..	..	1	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	7	7	.....	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	..	..
..	1	..	..	..	..	..	..	..	1	3	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	..	..
..	..	..	..	1	..	..	..	..	1	..	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	1	..	1	..	..	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..
..	1	..	1	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
..	..	..	..	1	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
3	1	2	1	6	4	..	..	..	14	4	.....	14	1	..	1	..	1	1	..	..	..	..	..	..	..	12	3	3	..
..	..	..	1	..	1	..	..	..	..	2	.....	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	..
..	..	..	..	..	..	..	..	..	..	1	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	..	1	.....	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	..	1	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	1	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	1	..	..	1	..	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	1	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	7	3	1	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..
..	..	..	..	..	..	..	1	..	..	1	.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..

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TABLE 21.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN HACKENSACK.		AGE PERIODS.										
		Under one month	Under 1 year "not including under one month	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Suicide by Poison	155	..	..	..	..	..	..	..	..	..	..
Suicide by Firearms	159	..	..	..	..	..	..	..	1	..	..
Accidental Drowning	169	..	..	..	..	..	..	..	1	..	..
Traumatism by Fall	172	..	..	..	..	..	..	..	..	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	..	..	..	..	..	..	..	1	..	1
Excessive Cold	178	..	..	..	..	..	..	..	..	..	..
Electricity (lightning excepted)	181	..	..	..	..	..	..	..	..	..	1
Homicide by Other Means	184	..	..	..	..	..	..	..	1	..	..
Cause of Death not Specified or Ill-defined	189	1	3	1	..	..	..	..	..	..	..

Total deaths, 218. Death-rate, 14.89

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.									SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	..	..	..	1	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	1	..	..	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
1	..	..	..	..	..	..	..	..	1	1	.....	.....	..	..	..	..	..	..	..	..	..	..	1	1	1	1	..	..
..	..	..	1	..	..	..	..	..	1	...	.....	.....	..	1	..	..	..	..	..	..	..	..	..	..	1	....	..	..
..	..	..	..	1	..	..	..	..	3	...	.....	.....	..	1	1	1	..	..	..	..	..	..	..	..	2	1	..	..
..	..	..	1	..	..	..	..	..	..	1	.....	.....	..	..	..	..	..	1	..	..	..	..	..	1	1	....	..	..
..	..	..	..	..	..	..	..	..	1	...	.....	.....	..	..	..	..	..	..	..	..	..	..	..	..	1	....	..	..
..	..	..	..	..	..	..	..	..	1	...	.....	.....	..	..	..	..	..	..	..	..	1	..	..	..	....	1	..	..
..	..	..	..	..	..	..	..	..	2	3	1	5	..	..	..	..	..	..	..	..	..	..	..	..	....	5	..	..

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TABLE 22.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN HAMMONTON.	AGE PERIODS.													
	Under one month	Under 1 Year "not including under one month"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1	....	....	....	..	1	1	..	..	..	....	..	..
Whooping Cough 8	....	....	1	..	..	..	..	..	..	....	..	..
Diphtheria and Croup 9	....	....	1	..	..	..	..	..	..	....	..	..
Dysentery 14	....	....	....	..	..	..	..	..	..	....	..	..
Tuberculosis of the Lungs 28	....	....	....	..	..	1	2	1	2	....	2	..
Abdominal Tuberculosis 31	....	....	....	..	..	..	..	..	..	....	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver 40	....	....	....	..	..	..	..	..	..	....	..	..
Acute Articular Rheumatism 47	....	....	....	..	1	..	..	..	..	....	..	..
Cerebral Hæmorrhage, Apoplexy 64	....	....	....	..	..	..	..	..	..	....	..	..
Acute Endocarditis 78	....	....	....	..	..	..	..	..	1	....	..	..
Organic Diseases of the Heart 79	....	....	....	..	..	..	..	..	..	....	..	..
Acute Bronchitis 89	....	....	....	..	..	..	..	..	..	....	..	..
Bronchopneumonia 91	....	1	....	..	..	..	..	..	..	....	..	..
Pneumonia 92	....	....	....	..	..	1	..	..	1	....	..	..
Pleurisy 93	....	....	....	..	..	..	..	..	..	....	..	..
Pulmonary Congestion, Pulmonary Apoplexy 94	....	....	....	..	..	..	..	..	..	....	..	..
Asthma 96	....	....	....	..	..	..	1	..	..	....	..	..
Other Diseases of the Stomach (cancer excepted) 103	....	3	....	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (under 2 years) 104	2	3	3	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (2 years and over) 105	....	....	....	..	..	..	..	..	..	2	..	..
Hernias, Intestinal Obstructions 109	....	....	1	..	..	..	..	..	..	....	..	..
Bright's Disease 120	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Bladder 124	....	....	....	..	..	..	..	..	..	....	..	..
Puerperal Albuminuria and Convulsions 138	....	....	....	..	..	1	..	..	..	1	..	..
Congenital Debility, Icterus, and Sclerema 151	3	....	....	..	..	..	..	..	..	....	..	..
Other Diseases Peculiar to Early Infancy 152	1	....	....	..	..	..	..	..	..	....	..	..
Senility 154	....	....	....	..	..	..	..	..	..	....	..	..
Conflagration 166	....	....	....	..	..	..	1	..	..	....	..	..
Burns (conflagration excepted) 167	....	....	....	1	..	..	1	..	..	....	..	..
Accidental Drowning 169	....	....	....	..	..	1	..	..	..	....	..	..
Homicide by Firearms 182	....	....	....	..	..	..	..	..	..	....	..	1

Total deaths, 68. Death-rate, 12.98.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
							1	1		2															2		
							1			1															1		
								1		1															1		
		1						1		1																1	
				1			5	4		7					2									5	4		
		1						1		1																1	
								1		1																1	
							1								1										1		
		2	2				2	2		3				1										3		1	
								1		1														1			
		1	2				2	1		2	1													1		2	
1							1			1															1		
								1		1															1		
	1	1	1	1			3	3		1				1	4									4		2	
			1					1																		1	
		1					1	1		1					1									1		1	
		1					1	3		4														1	3		
							5	3		3														3	3	1	
			1				1	2		2			1											1	1		
		2					1	1		1	1				1									1		2	
		1					1								1									1			
								2		1					1									2			
							1	2		3															3	1	
							1	1		1																	2
			2				1	1		1				1			1								1		
							1	1								1	1								2		
							1	1		1							1								1		
								1																			

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TABLE 23.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN HARRISON.	AGE PERIODS.												
	Under one month	Under 1 year "not including under 1 mo."	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Measles 6	..	..	2	..	..	..	..	..	..	..	..	..
Whooping Cough 8	..	3	5	..	..	..	..	..	..	..	..	..
Diphtheria and Croup 9	..	1	1	..	..	..	..	..	..	..	..	..
Including Croup 9A	..	..	2	1	..	..	..	..	..	..	..	..
Influenza 10	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis of the Lungs 28	..	..	1	..	1	2	3	3	3	8	6	..
Tuberculous Meningitis 30	..	..	1	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis 31	..	..	..	..	..	..	..	..	1	..	..	..
Cancer and Other Malignant Tumors of the Stomach Liver ...40	..	..	..	..	..	..	..	..	..	..	..	1
Cancer and Other Malignant Tumors of the Female Genital Organs ...42	..	..	..	..	..	..	..	..	..	1	..	..
Cancer and Other Malignant Tumors of the Breast ...43	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified ...45	..	..	..	..	..	..	..	..	..	..	..	..
Acute Articular Rheumatism 47	..	..	..	1	..	..	..	..	..	..	..	..
Diabetes 50	..	..	..	..	..	..	..	..	..	..	..	..
Anæmia, Chlorosis 54	..	..	..	..	..	..	..	..	..	..	..	..
Simple Meningitis 61	..	1	2	..	..	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy 64	..	..	..	..	..	..	1	..	..	..	2	..
Paralysis Without Specified Cause 66	..	..	..	..	..	..	..	..	..	..	..	..
Epilepsy 69	1	..	..	..	..	..	..	..	..	..	..	..
Convulsions of Infants 71	..	2	1	..	..	..	..	..	..	..	..	..
Pericarditis 77	..	..	..	..	..	..	..	..	..	..	..	..
Acute Endocarditis 78	..	..	1	..	1	..	1	..	..	..	..	2
Organic Diseases of the Heart 79	..	..	..	..	..	..	..	..	..	..	..	1
Diseases of the Arteries, Atheroma, Aneurysm, etc.) ...81	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Veins (varices, hæmorrhoids, phlebitis, etc.) ...83	..	..	..	..	..	..	..	..	..	..	..	..
Acute Bronchitis 89	..	..	1	..	..	..	..	..	..	..	..	1
Chronic Bronchitis 90	..	..	..	..	..	..	..	..	..	..	..	1
Bronchopneumonia 91	..	2	3	..	..	..	..	..	..	..	..	..
Pneumonia 92	..	1	..	1	..	1	..	1	1	1	1	..
Pulmonary Congestion, Pulmonary Apoplexy ...94	..	..	..	1	..	..	1	..	..	..	1	..
Asthma 96	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Respiratory System (tuberculosis excepted) ...98	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Stomach (cancer excepted ..103	..	2	..	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years) ...104	..	20	..	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)...105	..	..	..	..	..	..	..	..	..	2	..	1
Cirrhosis of the Liver 113	..	..	..	..	..	..	..	..	1	..	1	1
Bright's Disease 120	1	1	..	..	..	..	..	..	..	..	1	..
Diseases of the Prostate 126	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Hæmorrhage 135	..	..	..	..	..	..	..	..	..	1	..	..
Puerperal Septichæmia 137	..	..	..	..	..	..	1	..	..	..	..	..
Other Diseases of the Skin and Annexa 145	..	1	..	..	..	1	..	..	..	..	..	..
Congenital Malformations (stillbirths not included) ...150	..	1	..	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema...151	8	1	..	..	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy....152	4	1	..	..	..	..	..	..	..	..	..	..
Senility 154	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Poison 155	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Drowning 158	..	..	..	..	..	..	..	..	..	..	..	..
Burns (conflagration excepted) 167	..	..	1	..	..	..	..	..	..	..	..	..
Accidental Drowning 169	..	..	..	1	..	..	..	..	..	..	..	..
Traumatism by Fall 172	..	1	..	..	..	..	..	..	..	..	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) ..175	..	..	3	..	..	..	1	..	2	1	2	..
Effects of Heat 179	..	..	..	..	..	..	1	..	..	..	..	..
Electricity (lightning excepted) 181	..	..	..	..	..	..	..	1	..	..	..	..
Cause of Death Not Specified or Ill-defined...189	..	2	..	..	..	..	..	..	..	..	..	..

Total deaths, 194. Death-rate, 13.08.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	.....	2	...	...
...	...	...	...	...	...	...	2	6	.....	7	...	...	...	...	1	...	...	...	...	...	...	...	.....	8	...	...
...	...	...	...	...	...	...	3	3	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	.....	2	3	...
...	...	...	...	...	...	...	3	...	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	.....	3	...	...
...	1	...	...	...	...	...	...	1	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	...	1	...
...	...	3	...	...	...	...	15	15	1	18	1	...	2	5	...	3	...	...	1	...	...	...	18	9	3	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	...	...	...	...	...	1	.....	...	1	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	1	1	...	...	...	...	1	2	.....	...	...	...	...	3	...	...	...	...	...	...	...	...	1	...	2	...
1	1	...	...	...	...	...	...	3	.....	1	...	...	...	2	...	...	...	...	...	...	...	...	2	...	1	...
...	1	...	...	...	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	.....	...	1	...
...	1	...	...	...	...	...	...	1	.....	...	...	1	...	...	...	...	...	...	...	...	...	...	.....	...	1	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...
...	1	1	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	1	...	...	...	...	...	...	4	.....	3	...	...	...	1	...	...	...	...	...	...	...	...	1	3	...	...
...	1	2	1	1	...	...	5	2	.....	...	2	...	2	1	...	...	...	...	1	...	1	...	5	1	1	...
...	1	...	...	...	...	...	1	...	.....	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	...	...	...	...	2	1	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	.....	3	...	...
...	...	1	...	...	...	...	...	1	.....	...	...	...	...	...	1	...	...	...	...	...	...	...	.....	...	1	...
...	...	1	1	1	...	...	1	7	.....	4	2	...	...	2	...	...	...	...	...	...	...	...	3	4	1	...
2	...	1	...	...	...	...	3	1	.....	1	...	...	2	1	...	...	...	...	...	...	...	...	2	1	...	1
...	...	...	1	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
1	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	1	...	...	...	...	2	...	.....	1	1	...	...	1	...	...	...	...	...	...	...	...	2	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	...	1	...	...	6	...	.....	6	...	...	1	...	...	...	...	...	...	...	...	...	1	6	...	...
2	...	1	...	...	...	...	5	4	.....	5	...	...	1	1	...	1	...	...	1	...	...	...	4	3	2	...
...	...	1	...	...	...	...	3	1	.....	2	...	...	1	...	1	...	...	...	...	...	...	...	3	1	...	...
...	...	...	1	...	...	...	1	...	.....	...	1	...	...	...	...	...	...	...	...	...	...	...	.....	...	1	...
1	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	.....	2	...	...
...	...	...	...	...	...	...	13	7	.....	20	...	...	...	...	...	...	...	...	...	...	...	...	.....	20	...	...
...	...	...	...	...	...	...	2	1	.....	1	...	...	...	2	...	...	...	...	...	...	...	...	2	1	...	...
...	...	...	1	...	...	...	2	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	.....	...	...	...
3	1	1	2	...	...	...	4	6	.....	5	1	...	...	1	...	...	...	...	1	...	...	...	3	1	...	...
...	...	1	...	...	...	...	1	...	.....	...	...	...	...	4	...	...	...	...	...	...	...	...	5	3	2	...
...	...	...	...	...	...	...	...	1	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	.....	...	1	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	...	2	...
...	...	...	...	...	...	...	5	4	.....	9	...	...	...	...	...	...	...	...	...	...	...	...	.....	9	...	...
...	...	...	...	...	...	...	4	1	1	5	...	...	...	...	...	...	...	...	...	...	...	...	.....	5	...	...
...	...	...	1	...	...	...	...	1	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	...	1	...
...	...	...	1	...	...	...	...	1	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	.....	...	1	...
1	...	...	...	...	...	...	1	...	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	.....	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	...	1	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	...	1	...
...	...	1	...	...	...	...	10	...	1	7	...	...	...	...	...	...	...	...	...	...	...	...	.....	...	1	...
...	...	...	...	...	...	...	...	1	.....	...	...	...	1	1	1	...	...	...	1	...	...	...	5	5	1	...
...	...	...	...	...	...	...	1	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	1	.....	1	1	...
...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	.....	...	2	...

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TABLE 24.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN HOBOKEN.		AGE PERIODS.												
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1	..	..	..	..	..	1	2	3	3	2	1	1
Measles	6	..	5	22	..	..	..	..	..	..	..	..	..
Scarlet Fever	7	..	1	5	3	..	..	..	1	..	..	..	..
Whooping Cough	8	..	4	3	..	..	..	..	..	..	..	..	..
Diphtheria and Croup	9	..	1	13	..	..	..	..	1	..	..	..	..
Including Croup	9A	..	..	3	..	..	..	..	..	..	..	..	..
Dysentery	14	..	..	..	..	..	..	..	..	..	1	..	..
Erysipelas	18	1	1	..	..	..	..	1	1	1	..	..	..
Purulent Infection and Septichæmia	20	..	..	..	1	..	1	..	..	..	..	..	..
Rabies	23	..	..	..	1	..	..	..	..	..	..	..	..
Tuberculosis of the Lungs	28	..	1	3	2	2	6	13	23	25	22	16	10
Acute Miliary Tuberculosis	29	..	..	1	..	1	..	..	2	..	..	..	..
Tuberculous Meningitis	30	..	6	3	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis	31	..	..	3	2	1	..	1	2	..	..	..	1
Pott's Disease	32	..	..	..	..	1	..	..	..	..	..	..	..
Tuberculosis of Other Organs	34	..	1	..	..	..	..	..	..	1	..	..	..
Syphilis	37	3	1	..	..	..	..	..	..	..	1	1	..
Cancer and Other Malignant Tumors of the Buccal Cavity	39	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	1	..	..	1	1	6
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum	41	..	..	..	..	..	..	..	..	..	1	1	..
Cancer and Other Malignant Tumors of the Female Genital Organs	42	..	..	..	..	..	..	..	..	..	2	..	2
Cancer and Other Malignant Tumors of the Breast	43	..	..	..	..	..	..	..	..	..	..	..	1
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified	45	..	..	..	..	..	..	..	..	..	..	..	1
Acute Articular Rheumatism	47	..	..	..	..	2	..	..	..	..	..	..	..
Chronic Rheumatism and Gout	48	..	..	..	..	..	..	..	..	..	..	..	..
Diabetes	50	..	..	..	..	..	..	1	..	..	..	..	2
Anæmia, Chlorosis	54	..	..	..	..	..	..	..	..	..	..	..	..
Other General Diseases	55	..	..	2	..	..	..	..	..	..	..	..	..
Alcoholism (acute or chronic)	56	..	..	..	..	..	..	..	1	2	1	2	..
Simple Meningitis	61	..	6	4	1	1	2	..	..	..	..	1	..
Including Cerebrospinal Fever	61A	..	2	3	1	..	..	1	..	..	..	..	1
Other Diseases of the Spinal Cord	63	..	1	1	..	..	..	..	..	..	..	..	..
Cerebral hæmorrhage, Apoplexy	64	1	1	..	..	..	..	..	1	2	2	3	5
Paralysis Without Specified Cause	66	..	..	..	1	..	..	..	1	..	..	..	1
Other Forms of Mental Alienation	68	..	..	..	..	..	..	..	..	..	..	..	..
Epilepsy	69	..	..	..	..	..	..	..	..	..	..	..	..
Convulsions of Infants	71	5	8	3	..	..	..	..	..	..	..	..	..
Pericarditis	77	..	..	..	..	..	..	..	1	..	..	..	..
Acute Endocarditis	78	..	..	1	..	..	..	3	2	4	3	4	4
Organic Diseases of the Heart	79	..	..	..	..	5	..	1	2	3	4	6	6
Angina Pectoris	80	..	..	..	..	..	..	..	..	..	1	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	1	..	..	..	..	..	..	1
Diseases of the Larynx	87	1	..	..	..	..	..	..	..	..	..	..	..
Acute Bronchitis	89	1	11	3	..	..	1	..	..	..	..	..	..
Chronic Bronchitis	90	..	1	..	..	..	..	..	..	..	..	..	..
Bronchopneumonia	91	2	32	24	1	..	..	1	..	..	..	..	..
Pneumonia	92	2	11	22	3	1	3	3	4	1	3	7	10
Pleurisy	93	..	2	4	..	..	..	..	1	2	..	1	..
Pulmonary Congestion, Pulmonary Apoplexy	94	..	1	..	..	..	..	1	..	1	..	4	..
Asthma	96	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Respiratory System (tuberculosis excepted)	98	..	..	1	..	..	..	..	..	..	1	..	..
Other Diseases of the Mouth and Annexa	99	..	1	..	..	..	..	..	..	..	..	..	..
Diseases of the Pharynx	100	..	1	..	..	..	..	..	..	..	1	..	..
Ulcer of the Stomach	102	..	..	..	..	..	..	..	..	..	1	1	..

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AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	9	4	.....	4	1	..	1	1	..	..	1	2	..	1	2	..	4	3	1	...
...	...	...	...	...	...	...	11	16	.....	27	..	..	..	..	..	..	..	..	..	..	..	..	....	27	..	...
...	...	...	...	...	...	...	8	2	.....	9	..	..	1	..	..	..	..	..	..	..	..	..	1	9	..	...
...	...	...	...	...	...	...	3	4	.....	7	..	..	..	..	..	..	..	..	..	..	..	..	....	7	..	...
1	...	...	...	...	...	...	11	5	.....	13	..	..	..	..	1	..	..	..	..	1	1	..	2	14	..	...
...	...	...	...	...	...	...	5	3	.....	8	..	..	..	..	..	..	..	..	..	..	..	..	....	8	..	...
...	...	...	...	...	...	...	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
1	...	2	...	...	...	...	1	7	.....	5	..	..	2	..	1	..	..	..	..	..	..	..	2	4	2	...
...	...	...	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	..	...
...	...	...	...	...	...	...	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
9	6	4	2	...	...	...	98	46	1	78	2	..	29	12	3	2	3	3	2	1	2	2	71	63	10	...
...	...	...	...	...	...	...	3	1	.....	3	1	..	..	..	..	..	..	..	..	..	..	..	1	3	..	...
...	...	...	...	...	...	...	10	4	.....	14	..	..	..	..	..	..	..	..	..	..	..	..	....	14	..	...
...	...	...	...	...	...	...	7	3	.....	7	..	..	2	..	1	..	..	..	..	..	..	..	2	8	..	...
...	...	...	...	...	...	...	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
1	...	1	...	...	...	...	3	1	.....	3	..	..	1	..	..	..	..	..	..	..	..	..	3	1	..	...
1	...	...	...	...	...	...	4	3	.....	5	..	..	1	1	..	..	..	..	..	..	..	..	2	5	..	...
...	1	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	...
7	5	3	4	...	...	...	13	15	.....	10	..	..	7	7	1	..	..	1	..	..	1	1	13	1	9	...
1	1	4	...	1	...	...	3	6	.....	8	..	..	6	..	..	..	..	..	..	..	..	..	4	1	4	...
2	4	1	...	...	...	...	...	12	.....	2	..	..	5	..	3	1	..	1	..	..	..	..	9	1	2	...
1	2	...	...	...	...	...	...	4	.....	1	..	..	2	..	..	..	1	..	..	..	..	..	3	1	..	...
...	...	3	...	...	...	...	4	...	.....	1	..	1	1	1	..	..	..	..	..	..	..	..	3	....	1	...
...	...	...	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	..	...
...	...	...	1	...	...	...	...	1	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	....	....	1	...
2	...	6	2	...	...	...	6	7	.....	3	1	..	4	2	1	..	1	..	..	1	..	..	3	1	4	...
2	...	...	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...
...	...	...	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	..	...
1	1	1	...	...	...	...	9	...	1	3	..	..	3	1	..	..	1	..	..	1	..	..	1	3	..	...
1	...	...	1	1	...	...	5	10	.....	13	..	..	..	1	..	..	..	..	1	..	..	..	1	12	2	...
...	1	...	...	...	...	...	8	6	.....	13	..	..	1	..	..	..	..	..	1	..	..	..	2	11	1	...
1	...	...	...	...	...	...	2	...	.....	2	..	..	..	1	..	..	..	..	..	..	..	..	1	2	..	...
8	6	23	11	3	...	...	35	29	.....	23	2	..	16	10	5	3	1	1	..	3	1	..	41	4	19	...
1	1	1	1	...	...	...	4	3	.....	3	..	..	1	3	..	..	..	..	..	1	..	..	6	1	..	...
...	...	...	1	1	...	...	...	2	.....	1	..	..	1	..	..	..	..	..	..	..	..	..	....	....	2	...
...	...	...	1	...	...	...	...	1	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	....	....	1	...
...	...	...	...	...	...	...	3	13	.....	16	..	..	..	..	..	..	..	..	..	..	..	..	....	16	..	...
...	...	...	...	...	...	...	1	..	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	1	....	..	...
3	9	12	7	2	...	...	35	24	.....	20	2	..	18	11	5	..	2	..	..	..	1	..	32	14	13	...
1	7	15	5	3	1	...	34	25	.....	20	1	..	18	13	5	..	..	..	..	..	2	..	21	16	22	...
...	...	3	...	1	...	...	4	1	.....	..	..	..	2	1	..	..	..	..	1	1	..	..	3	1	1	...
1	...	...	2	2	...	...	6	1	.....	3	..	..	3	1	..	..	..	..	..	..	..	..	2	2	4	...
1	...	...	...	...	...	...	2	...	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...
1	...	...	1	2	...	...	10	10	.....	16	1	..	2	1	..	..	..	..	..	..	..	..	2	16	2	...
...	...	2	3	...	...	...	4	2	.....	3	..	..	2	2	..	..	..	..	..	..	..	..	3	1	2	...
...	2	3	4	...	...	...	37	32	.....	30	3	..	2	4	..	..	..	..	..	..	..	..	3	31	5	...
9	7	10	11	2	...	...	73	46	.....	65	2	1	24	16	3	..	2	3	2	..	1	..	33	58	23	...
...	...	1	2	...	...	...	10	3	.....	7	2	..	..	1	1	..	2	..	..	..	..	..	6	6	1	...
1	2	4	...	...	...	...	3	11	.....	7	..	..	2	2	2	..	..	..	..	..	1	..	5	4	5	...
1	1	...	...	...	...	...	1	1	.....	1	..	..	..	..	1	..	..	..	..	..	..	..	1	....	1	...
...	1	...	...	...	...	...	2	1	.....	2	..	..	..	1	..	..	..	..	..	..	..	..	2	1	..	...
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
...	...	1	...	...	...	...	2	1	.....	2	..	..	1	..	..	..	..	..	..	..	..	..	1	1	1	...
...	...	...	...	...	...	...	1	1	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	1	1	..	...

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TABLE 24.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN HOBOKEN.		AGE PERIODS.													
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Other Diseases of the Stomach (cancer excepted)	103	1	1	....	..	..	1	..	..	..	....	..	..
Diarrhœa and Enteritis (under 2 years)	104	5	46	10	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (2 years and over)	105	....	....	....	2	..	..	1	..	..	1	1	2
Appendicitis and Typhlitis	108	....	....	1	..	..	..	2	..	1	....	1	2
Hernias, Intestinal Obstructions	109	....	1	....	..	..	..	..	..	1	....	..	1
Other Diseases of the Intestines	110	....	....	....	..	..	..	..	..	..	....	..	..
Cirrhosis of the Liver	113	....	....	....	..	..	..	..	1	2	2	5	6
Biliary Calculi	114	....	....	....	..	..	..	..	..	..	....	..	..
Simple Peritonitis (nonpuerperal)	117	1	2	....	..	..	..	..	..	..	....	..	..
Acute Nephritis	119	....	....	....	..	..	..	..	..	..	....	2	..
Bright's Disease	120	....	....	1	..	..	..	2	4	4	11	9	12
Other Diseases of the Kidneys and Annexa	122	....	....	....	1	..	..	..	..	..	....	..	..
Diseases of the Bladder	124	....	1	....	..	..	..	..	..	..	1	..	..
Other Diseases of the Urethra, Urinary abscess, etc.	125	....	....	....	..	..	..	..	..	..	....	..	..
Uterine Tumor (noncancerous)	129	....	....	....	..	..	..	..	..	..	....	1	2
Other Diseases of the Uterus	130	....	....	....	..	..	..	..	..	..	....	1	..
Cysts and Other Tumors of the Ovary	131	....	....	....	..	..	..	1	..	..	....	..	..
Accidents of Pregnancy	134	....	....	....	..	..	1	..	..	..	1	..	..
Other Accidents of Labor	136	....	....	....	..	..	..	..	1	..	....	..	..
Puerperal Septichæmia	137	....	....	....	..	..	..	..	2	2	1	..	..
Puerperal Albuminuria and Convulsions	138	....	....	....	..	..	..	..	..	..	1	..	..
Following Childbirth (not otherwise defined)	140	....	....	....	..	..	..	..	1	..	....	..	..
Gangrene	142	....	....	....	..	..	..	..	..	..	....	..	..
Acute Abscess	144	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Bones (tuberculosis excepted)	146	....	....	....	..	..	..	..	..	..	....	..	1
Congenital Malformations (stillbirths not included)	150	1	1	1	..	..	..	..	..	..	....	..	..
Congenital Debility, Icterus, and Sclerema	151	43	....	....	..	..	..	..	..	..	....	..	..
Other Diseases Peculiar to Early Infancy	152	1	....	....	..	..	..	..	..	..	....	..	..
Senility	154	....	....	....	..	..	..	..	..	..	....	..	..
Suicide by Poison	155	....	....	....	..	..	1	1	1	..	....	1	..
Suicide by Asphyxia	156	....	....	....	..	..	..	..	..	1	....	..	1
Suicide by Hanging or Strangulation	157	....	....	....	..	..	..	..	..	..	....	1	1
Suicide by Firearms	159	....	....	....	..	..	..	1	..	..	1	..	..
Suicide by Jumping from a High Place	161	....	....	....	..	..	..	..	..	..	....	1	..
Other Acute Poisonings	165	....	....	....	..	..	..	..	..	..	....	..	..
Burns (conflagration excepted)	167	....	....	3	..	1	1	..	..	..	....	..	..
Absorption of Deleterious Gases (conflagration excepted)	168	....	....	....	..	..	1	2	..	..	1	..	..
Accidental Drowning	169	....	....	1	..	..	..	1	1	2	....	1	2
Traumatism by Firearms	170	....	....	....	..	..	1	..	..	..	....	..	..
Traumatism by Fall	172	....	....	....	1	..	..	..	1	..	4	2	..
Traumatism by Machines	174	....	....	....	..	..	..	..	..	1	....	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	....	....	....	4	..	..	1	..	4	3	1	..
Starvation	177	....	....	....	..	..	..	..	..	..	....	..	..
Effects of Heat	179	....	....	....	..	..	..	1	1	..	1	..	2
Homicide by Firearms	182	....	....	....	..	..	1	..	..	2	1	..	..
Homicide by Other Means	184	....	....	....	..	..	1	1	..	..	....	1	..
Cause of Death Not Specified or Ill-defined	189	4	8	....	..	..	..	..	..	..	....	..	..

Total deaths, 1,266. Death-rate, 17.76.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	1	...	...	...	...	1	3	.....	2	...	...	2	..	..	..	..	..	..	..	..	..	....	3	1	...
...	...	...	...	...	...	...	35	26	.....	61	...	...	...	..	..	..	..	..	..	..	..	..	....	61	...	...
1	1	2	3	...	...	...	5	9	.....	6	...	...	4	3	1	..	..	..	..	..	..	..	5	4	5	...
...	...	...	...	...	...	...	2	5	.....	4	...	1	...	..	1	..	..	..	..	..	1	..	3	3	1	...
...	...	...	1	...	...	...	3	1	.....	1	...	...	1	1	..	..	..	..	..	..	1	..	1	2	1	...
...	...	1	...	...	...	...	...	1	.....	1	...	...	...	1	..	..	..	..	..	..	..	..	1	...	...	...
1	3	2	...	...	...	...	15	7	.....	11	...	...	8	2	..	..	..	..	..	..	1	..	13	5	4	...
...	...	...	1	...	...	...	...	1	.....	...	...	...	...	1	..	..	..	..	..	..	..	..	....	...	1	...
...	...	...	...	...	...	...	1	2	.....	3	...	...	...	..	..	..	..	..	..	..	..	..	....	3	...	...
...	...	...	...	...	...	...	...	2	.....	1	...	...	...	..	..	..	..	..	..	..	..	..	1	...	1	...
7	7	22	12	5	...	...	60	37	.....	35	3	1	25	14	2	2	1	3	1	1	6	3	50	20	25	2
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	...	...	...	...	...	2	...	.....	2	...	...	...	..	..	..	..	..	..	..	..	..	1	1	...	...
...	...	1	...	...	...	...	1	...	.....	...	...	...	1	..	..	..	..	..	..	..	..	..	....	...	1	...
...	...	...	...	...	...	...	...	3	.....	2	...	...	...	..	..	..	..	1	..	..	..	..	2	...	1	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	...	...	...	...	...	...	1	.....	...	...	...	...	..	..	..	1	..	..	..	..	..	....	1	...	...
...	...	...	...	...	...	...	...	2	1	1	...	...	1	..	..	..	..	..	..	..	..	..	2	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	..	..	..	1	..	..	..	..	..	1	...	...	...
...	...	...	...	...	...	...	...	5	.....	1	...	...	2	..	1	..	..	..	1	..	..	..	5	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	..	1	..	..	..	..	..	..	..	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	..	..	..	..	..	..	..	..	..	1	...	...	...
...	...	...	1	...	...	...	1	...	.....	...	...	...	1	..	..	..	..	..	..	..	..	..	1	...	...	...
...	...	...	...	1	...	...	1	...	.....	...	...	...	1	..	..	..	..	..	..	..	..	..	....	...	1	...
...	...	1	...	...	...	...	2	...	.....	...	...	...	1	..	1	..	..	..	..	..	..	..	1	1	...	...
...	...	...	...	...	...	...	1	2	.....	3	...	...	...	..	..	..	..	..	..	..	..	..	....	3	...	...
...	...	...	...	...	...	...	24	19	.....	43	...	...	...	..	..	..	..	..	..	..	..	..	....	43	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	3	2	1	...	...	2	4	.....	1	1	...	1	3	..	..	..	..	..	..	..	..	1	...	5	...
1	...	1	1	...	...	...	6	1	.....	2	...	...	3	1	..	..	..	..	1	..	..	..	3	3	1	...
1	1	...	...	...	...	...	2	2	.....	1	...	...	3	..	..	..	..	..	..	..	..	..	3	1	...	...
...	1	...	...	...	...	...	2	1	.....	1	...	...	2	..	..	..	..	..	..	..	..	..	2	...	...	...
2	1	...	...	...	...	...	5	...	.....	...	...	...	3	1	1	..	..	..	..	..	..	..	2	2	...	...
...	...	...	...	...	...	...	1	...	.....	...	...	...	1	..	..	..	..	..	..	..	..	..	....	1	...	...
1	...	...	...	...	...	...	...	1	.....	1	...	...	...	..	..	..	..	..	..	..	..	..	....	...	1	...
1	...	...	...	...	...	...	3	3	.....	3	...	...	2	..	1	..	..	..	..	..	..	..	1	5	1	...
1	...	...	...	...	...	...	5	...	.....	4	...	...	...	..	..	..	1	..	..	..	..	..	1	3	1	...
1	...	...	...	...	...	...	10	...	.....	1	...	...	3	2	1	1	1	..	..	..	..	1	5	3	1	1
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	..	..	..	..	..	..	..	..	..	....	1	...	...
...	1	1	1	...	...	...	8	3	.....	2	...	...	4	..	3	..	..	..	..	1	1	..	7	3	1	...
...	...	...	...	...	...	...	1	...	.....	...	...	...	...	1	..	..	..	..	..	..	..	..	1	...	...	...
4	1	1	...	...	...	...	17	2	.....	8	...	...	4	2	2	..	..	1	1	..	..	1	10	8	...	1
...	...	...	1	...	...	...	1	...	.....	...	...	...	1	..	..	..	..	..	..	..	..	..	1	...	...	...
1	1	1	...	...	...	...	3	1	.....	3	...	...	3	1	..	..	..	..	..	..	2	..	5	3	1	...
...	...	...	...	...	...	...	4	...	.....	2	...	...	...	..	1	..	..	..	..	1	..	..	2	2	...	...
...	...	...	...	...	...	...	3	...	.....	2	...	...	...	..	1	..	..	..	..	..	..	..	1	2	...	...
...	...	...	...	...	...	...	6	6	.....	12	...	...	...	..	..	..	..	..	..	..	..	..	....	12	...	...

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TABLE 25.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN IRVINGTON.	AGE PERIODS.												
	Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1												
Malaria 4												
Scarlet Fever 7							1					
Whooping Cough 8		1										
Diphtheria and Croup 9		1		1								
Including Croup 9A			2									
Erysipelas 18			1									
Tuberculosis of the Lungs 28			1			2	1	4	4	3		3
Acute Miliary Tuberculosis 29		1										
Tuberculous Meningitis 30			2									
Abdominal Tuberculosis 31						1						
Pott's Disease 32								1				
Cancer and Other Malignant Tumors of the Stomach, Liver 40												
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum 41												
Cancer and Other Malignant Tumors of the Breast 43												
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified 45										1		
Anæmia, Chlorosis 54												
Cerebral Hæmorrhage, Apoplexy 64										1	1	
Paralysis Without Specified Cause 66												
Acute Endocarditis 78			1		1	1			1			
Organic Diseases of the Heart 79			1		2							1
Angina Pectoris 80												
Diseases of the Arteries, Atheroma, Aneurysm, etc. 81												
Acute Bronchitis 89	1	1							1			
Chronic Bronchitis 90												
Bronchopneumonia 91		1										
Pneumonia 92												1
Pleurisy 93										1		
Other Diseases of the Stomach (cancer excepted) 103	1	1										
Diarrhœa and Enteritis (under 2 years) 104	1	5										
Diarrhœa and Enteritis (2 years and over) 105												
Cirrhosis of the Liver 113											1	
Other Diseases of the Liver 115												
Bright's Disease 120												1
Diseases of the Bladder 124												
Uterine Tumor (noncancerous) 129												1
Accidents of Pregnancy 134									1			
Puerperal Septichæmia 137							1					
Congenital Malformations (stillbirths not included 150	1											
Congenital Debility, Icterus, and Sclerema 151	4											
Other Diseases Peculiar to Early Infancy 152	2											
Senility 154												
Suicide by Poison 155										1		
Suicide by Asphyxia 156												
Absorption of Deleterious Gases (conflagration excepted) 168				1								
Accidental Drowning 169							1					
Traumatism by Fall 172							1					
Effects of Heat 179												
Cause of Death Not Specified or Ill-defined 189		1										

Total deaths, 160. Death-rate, 12.48.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
1							1			1					1								1			
1								1		1													1			
							1			1														1		
							1			1														1		
							1	1		2														2		
								2		2														2		
							1			1														1		
2		2	1	1			10	14	2	16	1		3				1		1		1	1	11	11	2	
								1		1														1		
							1	1		2														2		
		1						2		2														1	1	
								1							1									1		
	1	2	3				3	3					5	1									2		4	
1	2						1	2			1		1					1					1	1	1	
				1				1		1															1	
	1							2		2													2			
			1					1			1												1			
2	1	3	5	3			5	11		5		1	8									2	8	1	7	
			1				1			1															1	
1	1	2	2	1			4	7		6			4	1									7	2	1	
1		2	3	1			2	9		7			3	1									2	4	5	
		1						1		1														1		
	2			3			4	1		2			3										3		2	
							1	2		3													1	2		
	1		1				1	1					1				1						1		1	
								1		1														1		
1		2	2	2			4	4		5			2			1							4		4	
							1			1														1		
			1				1	2		2			1											2	1	
							3	3		6														6		
		1	1				1	1		1			1										1		1	
	1	2	1				3	3					4								1		3		3	
			1					1					1												1	
		3	6				2	8		4	2		2	2									5		5	
			1				1						1										1			
								1		1													1			
								1		1													1			
								1		1													1			
							1			1														1		
								4		4														4		
								2		2														2		
			1					1					1												1	
							1			1															1	
	1	2					2	1			1		1			1							2		1	
							1			1														1		
							1			1														1		
							1			1													1			
			1					1					1												1	
										1														1		

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TABLE 26.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES

THE YEAR ENDING

DEATHS IN JERSEY CITY		AGE PERIODS.										
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Typhoid Fever	1	..	..	1	2	1	3	2	4	2	2
Malaria	4	..	..	..	1	..	..	..	..	..	..
Measles	6	..	13	24	3	..	..	..	..	..	..
Scarlet Fever	7	..	2	22	7	..	..	..	..	..	..
Whooping Cough	8	..	16	23	..	..	..	..	..	..	..
Diphtheria and Croup	9	..	2	26	14	2	..	..	..	..	..
Including Croup	9A	..	1	9	1	..	..	..	..	..	..
Influenza	10	..	..	..	..	1	..	..	..	..	..
Dysentery	14	..	..	..	..	..	..	..	..	..	..
Erysipelas	18	1	6	1	..	..	..	..	..	1	1
Other Epidemic Diseases	19	..	1	..	..	..	..	..	..	..	..
Purulent Infection and Septichæmia	20	..	..	..	..	..	..	..	..	1	..
Rabies	23	..	..	..	1	1	..	..	..	..	1
Tetanus	24	..	..	..	1	..	..	..	..	..	..
Tuberculosis of the Lungs	28	..	4	9	1	5	38	48	58	81	67
Acute Miliary Tuberculosis	29	..	1	..	..	2	1	..	2	1	1
Tuberculous Meningitis	30	..	6	14	4	2	1	..	1	2	..
Abdominal Tuberculosis	31	..	3	..	1	1	..	1	3	..	4
Tuberculosis of Other Organs	34	..	..	..	2	..	..	1	2	1	2
Disseminated Tuberculosis	35	..	..	1	..	..	2	..	..	..	..
Rickets	36	..	1	..	1	..	..	..	..	..	..
Syphilis	37	3	5	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Buccal Cavity	39	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	1	..	..	..	..	2	1	4
Cancer and Other Malignant Tumors of the Peritonæum Intestines, Rectum.	41	..	..	..	..	..	..	1	1	..	2
Cancer and Other Malignant Tumors of the Female Genital Organs.	42	..	1	..	..	..	..	2	..	..	2
Cancer and Other Malignant Tumors of the Breast	43	..	..	..	..	..	..	..	..	..	2
Cancer and Other Malignant Tumors of the Skin	44	..	..	..	..	..	1	1	..	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified.	45	..	..	..	..	1	..	..	..	1	1
Other Tumors (tumors of the female genital organs excepted).	46	..	..	..	..	..	..	..	..	..	..
Acute Articular Rheumatism	47	..	..	..	1	..	..	..	2	..	1
Chronic Rheumatism and Gout	48	..	..	..	..	..	..	..	..	..	..
Diabetes	50	..	..	2	..	..	..	1	1	2	1
Txophthalmic Goitre	51	..	..	..	..	..	..	..	..	1	..
Eddison's Disease	52	..	..	..	..	..	..	..	..	..	..
Leuchæmia	53	..	..	..	..	1	..	..	..	..	..
Anæmia, Chlorosis	54	..	..	2	..	..	1	..	1	1	1
Other General Diseases	55	..	..	..	..	..	..	2	1	1	..
Alcoholism (acute or chronic)	56	..	..	..	..	..	..	1	3	4	2
Chronic Lead Poisoning	57	..	..	..	..	..	..	..	..	..	..
Other Chronic Poisonings	59	..	..	..	..	..	..	..	..	1	..
Encephalitis	60	..	..	..	..	..	..	..	..	..	..
Simple Meningitis	61	1	8	17	6	1	..	1	1	1	1
Including Cerebrospinal Fever	61A	..	5	7	5	..	1	2	1	1	.
Locomotor Ataxia	62	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Spinal Cord	63	1	2	1	3	1	1	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	3	3	2	..	2	1	1	2	1	5
Softening of the Brain	65	..	..	..	..	..	..	..	..	..	..
Paralysis Without Specific Cause	66	..	..	..	..	..	..	..	1	..	..
General Paralysis of the Insane	67	..	..	..	..	..	..	..	..	..	..
Other Forms of Mental Alienation	68	..	..	..	..	..	1	..	1	..	1
Epilepsy	69	..	1	..	..	..	..	..	..	3	

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AGE PERIODS.									SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	2	2	1	..	..	..	..	..	12	10	1	14	..	1	1	1	..	..	..	3	..	2	..	10	11	1	..
..	..	..	..	1	..	..	..	..	2	..	..	1	..	..	..	..	..	..	..	1	..	..	..	1	1	..	..
..	..	1	..	..	..	..	..	..	18	23	..	38	..	..	..	..	1	..	..	..	..	2	..	1	40	..	..
..	..	..	..	..	..	..	..	..	16	15	2	30	1	..	..	..	..	..	..	..	..	..	..	..	31	..	..
..	..	..	..	..	..	..	..	..	19	20	..	39	..	..	..	..	..	..	..	..	..	..	..	..	39	..	..
1	1	..	1	..	..	..	..	..	23	24	1	43	..	..	1	..	1	..	..	..	1	..	..	2	44	1	..
..	..	..	..	..	..	..	..	..	8	3	..	11	..	..	..	..	..	..	..	..	..	..	..	..	11	..	..
..	..	..	1	..	1	..	..	..	..	3	..	3	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..
..	..	..	..	2	..	..	..	..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	2	..	..	..
5	1	..	1	2	..	1	..	..	13	7	..	14	1	..	1	2	1	..	..	..	1	..	..	8	10	2	..
..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	1	..	..	..	..	2	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	1	1	..
..	..	..	1	..	1	..	..	..	3	..	..	2	1	..	..	..	..	..	..	..	..	..	..	1	2	..	..
..	..	..	..	..	..	..	..	..	2	1	..	3	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..
50	32	26	14	17	5	..	..	..	286	164	20	297	8	..	25	51	8	3	11	6	16	..	9	16	225	172	52	1
..	..	1	..	..	..	..	..	..	1	2	..	8	..	..	..	1	..	..	..	..	..	..	..	..	2	7	..	..
..	..	..	..	..	..	..	..	..	17	13	1	30	..	..	..	..	..	..	..	..	..	..	..	..	2	28	..	..
2	..	..	2	..	1	..	..	..	12	6	2	12	..	..	1	3	2	..	..	..	..	..	..	..	10	8	..	..
..	..	..	1	..	..	..	..	..	5	4	..	7	..	..	1	..	..	..	1	..	..	..	..	..	4	4	1	..
..	..	..	..	..	..	..	..	..	1	2	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
..	..	..	..	..	..	..	..	..	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	1	..	..	..	..	..	..	..	7	2	..	8	..	..	..	..	1	..	..	..	..	..	..	..	1	8	..	..
..	1	2	2	2	2	1	..	..	9	1	..	3	..	..	1	5	1	..	..	..	..	..	..	..	7	1	2	..
7	7	20	12	19	11	1	..	..	46	39	2	31	..	1	10	23	4	1	1	3	6	..	2	3	54	11	20	..
1	1	2	..	2	4	..	..	..	5	9	2	9	..	..	1	1	..	1	1	..	..	..	1	..	11	3	..	..
8	5	6	1	4	1	..	..	..	..	30	3	14	1	..	7	6	1	..	1	..	..	..	..	..	20	3	7	..
..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	5	2	..	1	..	..	..	..	..	9	3	8	..
1	5	4	2	5	1	..	..	..	..	20	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	1	..	..	1	..	..	2	2	..	3	..	..	..	..	1	..	..	..	..	..	..	..	2	1	1	..
2	1	2	1	3	5	1	..	..	16	2	1	9	..	1	2	1	1	..	2	..	1	..	1	..	10	4	4	4
..	..	..	..	..	..	1	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
1	..	..	..	1	1	..	..	..	4	3	1	5	1	..	..	1	..	..	..	..	..	..	..	..	4	1	2	..
..	..	..	..	..	1	1	..	..	1	1	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..
1	..	4	1	7	5	..	..	..	8	17	..	13	2	..	5	4	..	..	..	..	1	..	..	..	15	5	5	..
..	..	..	..	1	..	..	..	..	..	2	..	1	..	..	..	1	..	..	..	..	..	..	..	..	1	..	1	..
..	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
1	..	..	..	..	..	..	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
..	1	1	..	2	..	..	..	..	6	4	..	5	1	..	..	2	..	..	1	..	..	..	1	..	5	4	1	..
..	..	2	1	1	..	..	..	..	6	2	..	4	1	..	..	2	..	..	..	1	..	..	..	..	6	1	1	..
3	3	2	1	2	1	..	..	..	19	3	..	12	..	..	3	5	..	..	..	..	1	..	1	..	8	9	4	1
..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
..	1	..	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1	..	1	..
..	1	..	..	..	1	..	..	..	1	1	..	..	..	..	..	1	..	..	1	..	..	..	..	..	1	1	..	..
1	2	..	2	..	..	..	..	..	24	18	2	38	..	..	1	1	..	1	..	..	..	..	1	..	4	37	1	..
..	..	1	..	..	..	..	..	..	15	8	..	18	..	..	1	..	2	..	..	1	..	..	1	..	4	19	..	..
..	..	..	1	1	..	..	..	..	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
..	1	..	2	2	2	..	..	..	12	4	..	14	..	..	1	..	..	..	..	1	..	..	..	..	6	8	2	..
7	16	30	27	66	53	23	..	..	127	115	11	106	9	3	54	52	5	4	2	..	2	1	4	..	127	26	88	1
..	..	..	..	..	1	1	..	..	..	2	..	1	..	..	..	1	..	..	..	..	..	..	..	..	1	..	1	..
..	..	..	2	5	4	2	..	..	5	9	1	7	1	..	1	3	..	1	..	..	..	..	1	..	8	1	5	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	2	1	1	..	..	4	3	1	5	..	..	..	2	..	..	..	..	..	..	..	..	1	2	4	..
..	..	1	..	..	1	..	..	..	3	3	..	6	..	..	..	..	..	..	..	..	..	..	..	..	2	4	..	..

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TABLE 26.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES

THE YEAR ENDING

DEATHS IN JERSEY CITY		AGE PERIODS.											
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Convulsions of Infants	71	9	15	4	..	..	..	..	..	..	..
Chorea	72	....	....	....	..	..	1	..	..	..	..
Neuralgia and Neuritis	73	....	....	....	..	..	..	..	..	..	2
Other Diseases of the Nervous System	74	....	....	....	..	..	..	..	..	..	..
Diseases of the Ears	76	....	....	2	..	..	..	..	..	..	..
Pericarditis	77	....	....	....	..	..	..	..	..	..	..
Acute Endocarditis	78	1	1	2	5	4	5	7	5	6	6
Organic Diseases of the Heart	79	2	6	1	8	5	4	5	12	8	17
Angina Pectoris	80	....	....	....	..	..	..	..	..	2	1
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	....	....	....	..	..	..	..	..	..	1
Embolism and Thrombosis	82	....	1	....	1	..	..	..	..	..	..
Diseases of the Veins (varices, hæmorrhoids, phlebitis, etc.)	83	....	....	....	..	..	..	..	1	..	..
Hæmorrhage; Other Diseases of the Circulatory System	85	....	....	....	..	..	..	1	..	..	..
Diseases of the Larynx	87	....	1	....	..	..	..	1	..	..	..
Diseases of the Thyreoid Body	88	....	....	....	..	..	1	..	..	..	..
Acute Bronchitis .....8.....	89	9	14	7	..	..	..	..	..	..	..
Chronic Bronchitis	90	....	1	1	..	..	..	..	..	..	..
Bronchopneumonia	91	2	56	66	40	2	..	..	1	3	2
Pneumonia	92	7	41	68	7	6	6	13	19	19	26
Pleurisy	93	....	1	5	..	..	1	..	..	3	2
Pulmonary Congestion, Pulmonary Apoplexy	94	2	4	2	2	2	..	1	1	2	5
Asthma	96	....	1	....	..	..	..	..	..	..	..
Pulmonary Emphysema	97	....	....	....	..	..	..	..	..	..	..
Other Diseases of the Respiratory System (tuberculosis excepted.	98	....	....	....	..	..	1	..	1	..	..
Other Diseases of the Mouth and Annexa	99	....	....	....	..	..	..	..	2	..	..
Diseases of the Pharynx	100	....	....	1	2	..	..	1	1	..	..
Diseases of the Œsophagus	101	....	....	....	..	..	..	..	..	..	..
Ulcer of the Stomach	102	....	....	....	..	..	..	..	..	..	2
Other Diseases of the Stomach (cancer excepted)	103	5	12	2	..	..	1	..	..	1	1
Diarrhœa and Enteritis (under 2 years)	104	25	246	44	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	....	....	13	4	1	2	1	3	2	..
Ankylostomiasis	106	....	....	....	..	..	..	..	1	..	..
Appendicitis and Typhlitis	108	....	1	1	3	9	2	7	4	2	4
Hernias, Intestinal Obstructions	109	2	6	1	1	..	1	1	1	2	2
Other Diseases of the Intestines	110	....	1	1	..	..	..	..	..	..	..
Cirrhosis of the Liver	113	....	1	....	..	..	..	..	..	6	5
Other Diseases of the Liver	115	....	....	....	..	..	..	..	..	2	1
Simple Peritonitis (nonpuerperal)	117	....	....	....	..	..	..	1	2	1	..
Other Diseases of the Digestive System (cancer and tuberculosis excepted).	118	....	....	....	..	..	..	..	1	..	..
Acute Nephritis	119	....	....	1	..	..	1	..	..	..	1
Bright's Disease	120	1	2	2	1	2	5	8	16	27	37
Other Diseases of the Kidneys and Annexa	122	....	....	....	..	..	..	1	1	..	..
Calculi of the Urinary Passages	123	....	....	....	..	..	1	..	..	2	1
Diseases of the Bladder	124	....	....	....	..	..	..	..	..	..	..
Other Diseases of the Urethra, Urinary Abscess, etc.	125	....	....	....	..	..	..	..	..	..	..
Diseases of the Prostate	126	....	....	....	..	..	..	..	..	..	..
Nonvenereal Diseases of the Male Genital Organs	127	....	....	....	..	..	..	..	..	..	..
Uterine Tumor (noncancerous)	129	....	....	....	..	..	..	..	..	..	2
Other Diseases of the Uterus	130	....	....	....	..	..	..	2	1	1	2
Cysts and Other Tumors of the Ovary	131	....	....	....	..	..	..	1	..	..	..
Salpingitis and Other Diseases of the Female Genital Organs.	132	....	....	....	..	1	..	2	4	2	..
Nonpuerperal Diseases of the Breast (cancer excepted)	133	1	....	....	..	..	..	..	..	1	..

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.								SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	..	..	..	..	..	..	..	15	13	.....	28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28	..	..
..	..	..	..	..	..	..	..	..	..	1	.....	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..
..	1	..	..	1	..	..	..	..	2	2	.....	3	..	..	..	..	1	..	..	..	..	..	..	..	..	3	..	1	..
1	..	..	..	..	..	..	..	..	..	1	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	..	..	..	1	..	..	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
7	17	22	15	28	17	15	..	..	71	92	4	77	7	1	28	32	3	2	..	..	8	..	..	5	77	35	50	1
13	21	14	30	42	47	10	1	..	145	101	13	113	10	3	36	47	8	3	4	2	5	..	8	7	108	64	71	3
..	1	1	2	2	2	..	..	..	6	5	.....	5	..	..	2	2	1	..	..	..	..	..	..	1	4	3	3	1
..	1	3	2	12	12	14	3	..	24	24	.....	15	5	..	6	15	1	3	..	1	..	..	1	1	11	3	33	1
..	..	..	..	1	..	..	..	..	..	3	.....	2	..	..	..	1	..	..	..	..	..	..	..	..	..	2	1	..	..
..	..	1	..	..	..	..	..	..	2	..	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	2	..	..	..	..
..	..	..	..	..	..	..	..	..	..	1	.....	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..
..	1	..	..	..	..	..	..	..	1	2	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	1	1	2	6	8	1	1	..	21	29	4	35	2	1	4	5	2	..	..	..	..	..	..	1	..	5	32	13	..
..	..	..	1	4	4	2	..	..	5	8	.....	2	..	1	5	1	3	..	..	..	..	..	..	1	4	2	7	..
1	3	3	3	12	6	4	..	..	112	92	4	177	2	1	1	13	4	1	1	..	3	..	1	..	26	165	13	..
12	16	23	24	30	24	10	1	..	201	151	18	234	5	1	28	42	13	5	6	5	5	..	6	2	119	174	58	1
..	..	1	1	4	1	..	..	..	12	7	1	16	..	..	2	1	..	..	..	..	..	..	..	..	9	9	1	..
8	4	8	8	18	13	3	..	..	54	29	1	29	4	1	8	21	2	..	2	2	5	..	4	5	40	22	20	..
..	1	2	3	5	4	..	..	..	8	8	1	6	1	..	4	4	..	..	..	1	..	..	..	..	7	5	4	..
..	2	..	..	..	..	..	1	..	..	1	.....	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..
..	1	1	..	..	1	..	..	..	3	2	.....	4	..	..	..	..	1	..	..	..	..	..	..	..	2	2	1	..
..	..	..	..	..	..	..	..	..	..	2	.....	..	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..	..
..	..	..	..	..	..	..	..	..	3	2	.....	4	..	..	..	..	..	..	..	..	1	..	..	..	..	5	..	..
..	..	1	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	1	..	1	..	2	..	..	..	3	3	.....	2	..	..	3	1	..	..	..	..	..	..	..	..	3	2	1	..
3	1	1	4	3	2	..	..	..	21	15	1	27	..	..	3	1	..	2	1	..	1	..	1	..	12	22	2	..
..	..	..	..	..	..	..	..	..	175	140	9	314	..	..	..	..	..	..	..	..	1	..	..	..	..	315	..	..
3	3	1	9	8	8	4	..	..	27	35	1	35	1	3	..	13	2	3	..	1	3	..	1	..	22	24	16	..
..	..	..	..	..	..	..	..	..	1	..	.....	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
2	1	..	..	2	..	..	..	..	22	16	.....	25	..	..	2	1	5	..	1	..	3	..	1	..	11	26	1	..
..	2	3	4	3	5	..	..	..	14	20	.....	19	1	..	3	5	3	..	..	3	..	..	..	..	14	13	7	..
..	..	..	..	1	..	1	..	..	1	3	.....	2	..	..	..	2	..	..	..	..	..	..	..	..	..	2	2	..
4	6	9	5	8	2	1	..	..	31	16	3	25	..	1	8	8	..	..	..	1	2	..	1	1	28	6	13	..
1	1	..	5	4	1	1	..	..	3	13	.....	9	1	..	1	3	..	..	1	..	..	..	1	..	8	3	5	..
..	1	1	..	..	..	..	..	..	4	2	.....	6	..	..	..	..	..	..	..	..	..	..	..	..	2	3	1	..
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
..	..	..	2	..	2	..	..	..	3	4	.....	5	1	..	..	1	..	..	..	..	..	..	..	..	3	2	2	..
26	27	41	34	55	37	9	1	..	182	149	4	168	15	4	46	66	5	2	6	3	9	..	6	1	161	84	83	3
..	1	1	1	1	..	1	..	..	6	1	.....	3	..	..	1	2	1	..	..	..	..	..	..	..	4	3	..	..
..	2	..	..	1	..	..	..	..	2	5	.....	5	1	..	1	..	..	..	..	..	..	..	..	..	2	5	..	..
..	1	..	1	1	4	..	..	..	5	2	.....	3	1	..	2	1	..	..	..	..	..	..	..	..	5	..	2	..
..	..	..	..	1	..	..	..	..	1	..	.....	1	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..
..	..	..	..	1	..	..	..	..	1	..	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..
..	1	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
2	4	2	..	..	..	..	..	..	..	10	.....	6	..	..	2	..	..	..	2	..	..	..	..	..	5	3	2	..
1	..	..	..	..	..	..	..	..	..	7	.....	4	..	..	1	1	1	..	..	..	..	..	..	..	7	..	..	..
..	..	..	1	1	2	..	..	..	..	5	.....	2	1	..	..	2	..	..	..	..	..	..	..	..	..	2	3	..
..	1	..	..	..	..	..	..	..	..	10	1	8	..	..	..	..	1	..	..	..	1	..	..	..	9	1	..	..
..	..	..	..	..	..	..	..	..	..	2	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	1	1	..	..

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TABLE 26.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASE, THE YEAR ENDING

DEATHS IN JERSEY CITY.		AGE PERIODS.										
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Accidents of Pregnancy	134	..	..	..	..	..	1	4	1	..	..
Puerperal Hæmorrhage	135	..	..	..	..	..	1	1	2	2	..
Other Accidents of Labor	136	..	..	..	..	..	1	5	1	1	1
Puerperal Septichæmia	137	..	..	..	..	..	2	5	5	2	4
Puerperal Albuminuria and Convulsions	138	..	..	..	..	..	..	3	3	6	1
Puerperal Phlegmasia Alba Dolens, Embolus, Sudden Death	139	..	..	..	..	..	..	1	1	..	..
Gangrene	142	..	..	1	..	..	..	..	..	..	..
Acute Abscess	144	..	1	..	..	..	..	..	1	..	..
Other Diseases of the Skin and Annexa	145	..	3	..	..	..	..	..	..	1	..
Diseases of the Bones (tuberculosis excepted)	146	..	..	3	1	2	..	..	1	..	1
Diseases of the Bones (tuberculosis and rheumatism excepted)	147	..	1	..	..	..	..	..	..	..	..
Congenital Malformations (stillbirths not included)	150	1	3	1	1	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	201	18	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	14	20	1	..	..	..	..	..	..	..
Lack of Care	153	1	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..
Suicide by Poison	155	..	..	..	..	..	2	4	1	..	4
Suicide by Asphyxia	156	..	..	..	..	..	..	1	..	..	1
Suicide by Hanging or Strangulation	157	..	..	..	..	..	..	..	1	..	2
Suicide by Firearms	159	..	..	..	..	..	..	..	1	4	2
Other Acute Poisonings	165	..	..	..	2	..	..	3	..	1	1
Conflagration	166	..	1	..	1	..	..	1	..	..	..
Burns (conflagration excepted)	167	1	6	16	2	2	..	..	2	1	..
Absorption of Deleterious Gases (conflagration excepted)	168	1	..	..	..	..	..	..	3	..	3
Accidental Drowning	169	..	..	..	3	1	..	5	2	3	5
Traumatism by Firearms	170	..	..	..	..	1	..	..	..	..	1
Traumatism by Cutting or Piercing Instruments	171	..	..	..	..	..	..	..	..	..	..
Traumatism by Fall	172	..	1	3	3	2	..	3	4	2	2
Traumatism by Machines	174	..	..	..	..	..	..	..	..	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	..	1	2	4	4	5	13	8	19	4
Excessive Cold	178	..	..	..	..	..	..	..	..	..	..
Effects of Heat	179	..	4	..	..	..	..	1	1	1	1
Electricity (lightning excepted)	181	..	..	..	..	..	..	..	2	..	..
Homicide by Firearms	182	..	..	..	..	..	1	2	..	1	1
Homicide by Cutting or Piercing Instruments	183	..	..	..	..	..	..	1	1	..	..
Homicide by Other Means	184	..	..	..	..	..	..	1	1	..	..
Other External Violence	186	..	..	1	..	..	..	..	..	..	..
Cause of Death not Specified or Ill-defined	189	3	51	9	..	..	..	..	..	..	..

Total deaths, 4,384. Death-rate, 15.95.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.									SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
1										7		4			2	1									6	1		
										6		2			2	1			1						6			
1										10		2	2		2	1					3				10			
3										21		9			2	2	5				3				21			
1										14		13							1						13	1		
										2		1					1								2			
	1	1	1	1	3				2	6		4			1	3									3	3	2	
1									2	1		1			1	1									1	2		
1									4	1		3			1								1		1	4		
	1	2	1		1				9	4		7	1		1	1	1				1		1		5	7	1	
1									1	1		1												1	1	1		
										6		6														6		
									133	86	2	219														219		
									29	6		35														35		
										1		1														1		
				2	10	8	4		6	18		7	3		8	4	1	1						2	2	20	
2	1		3	1					10	8		14	1		2						1			11	5	2	
			1	1					3	1		3									1			3	1		
1			1						3	2		1			1	1				1	1			5			
3			1						5	4		3			1		1						3	5	1		2
					1				5	3		5			1		2							3	5		
			1	1					4	1	1	3										1	1	2	3		
2			1	1					14	20	2	30	1			2					1			5	28	1	
6	1	5	2	3					22	2	2	11			2	6	2		1		2			16	6	1	1
9	6	4	1	2					40	1	1	11		1	3	5	1			2	1	1	16	8	18	1	14
									2			2												1	1		
	1								1												1			1			
5		7	5	10	4	2			41	12	1	21	1		9	11	2	1		1	4	1	2	22	13	18	
			1						1				1											1			
13	15	3	3	5	1			2	100	2	1	51			3	12	11	2	3	5	8	3	4	57	38	3	4
	1								1										1					1			
	1	2	1	1	2		2		13	4		5	1		2	6			1			1	1	5	8	4	
	1								3			3												2		1	
									5			2					1	2						2	3		
									1	1								1			1			2			
									2			2												1	1		
										1		1													1		
		1						1	40	25	2	63											2	1	62	1	1

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TABLE 27.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES

THE YEAR ENDING

DEATHS IN KEARNY.		AGE PERIODS.												
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty--twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1											1	
Malaria	4							1					
Scarlet Fever	7			1									
Whooping Cough	8		5	2									
Diphtheria and Croup	9		1	1	1								
Dysentery	14												
Erysipelas	18									1			
Tuberculosis of the Lungs	28							2	2	3	4	1	1
Acute Miliary Tuberculosis	29									1			
Tuberculous Meningitis	30	1		2	1								
Abdominal Tuberculosis	31							1					
Disseminated Tuberculosis	35												
Syphilis	37		1										
Cancer and Other Malignant Tumors of the Buccal Cavity	39												
Cancer and Other Malignant Tumors of the Stomach, Liver	40										1		
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum	41												
Cancer and Other Malignant Tumors of the Female Genital Organs	42												
Cancer and Other Malignant Tumors of the Breast	43												1
Cancer and Other Malignant Tumors of the Skin	44												
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified	45												
Diabetes	50										1		
Anæmia, Chlorosis	54											1	
Alcoholism (acute or chronic)	56												
Simple Meningitis	61		2	3									
Locomotor Ataxia	62												
Other Diseases of the Spinal Cord	63			1									
Cerebral Hæmorrhage, Apoplexy	64												2
Softening of the Brain	65												
Paralysis Without Specified Cause	66												
Other Forms of Mental Alienation	68												
Convulsions of Infants	71	1	6										
Pericarditis	77											1	
Acute Endocarditis	78									1	2	1	
Organic Diseases of the Heart	79				1						1	1	
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81												
Embolism and Thrombosis	82												
Acute Bronchitis	89		1										
Chronic Bronchitis	90												
Bronchopneumonia	91		3	2	1								
Pneumonia	92		1	3	1		1		1	1	1		2
Pleurisy	93												
Pulmonary Congestion, Pulmonary Apoplexy	94		1	1				1					
Asthma	96												
Diseases of the Pharynx	100												
Ulcer of the Stomach	102												
Other Diseases of the Stomach (cancer excepted)	103												
Diarrhœa and Enteritis (under 2 years)	104	2	4										
Diarrhœa and Enteritis (2 years and over)	105												
Hernias, Intestinal Obstructions	109			1									
Cirrhosis of the Liver	113												1
Other Diseases of the Liver	115												
Acute Nephritis	119						1						

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AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	2	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	3	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	6	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...
...	...	...	...	...	...	...	...	3	...	3	...	...	...	...	...	...	1	...	...	...	...	...	...	3	...	...
...	...	...	2	...	...	...	2	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
2	1	3	...	...	...	...	13	6	...	7	3	...	1	1	...	1	...	4	3	...	...	1	13	6	1	...
...	...	...	...	...	...	...	1	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	3	1	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...
...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	1	1	...	...	...	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...
...	...	...	2	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
1	...	3	1	...	...	...	3	4	...	3	...	...	1	1	...	...	...	...	1	...	...	...	4	...	2	...
...	1	1	2	...	...	...	1	3	...	3	...	...	...	1	...	1	...	...	...	...	...	...	3	...	3	...
1	...	...	1	...	...	...	...	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...
...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
1	...	1	...	...	...	...	1	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	1	1	...	...	...	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	1	1	...	...	...	1	2	...	2	1	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...
...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...
...	...	1	...	...	...	...	1	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...
...	...	...	3	1	...	...	7	2	...	8	...	...	1	...	...	...	...	...	...	...	...	...	1	5	3	...
...	...	1	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	1	...	...	...	2	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...
...	1	5	6	1	...	...	9	6	...	9	2	...	...	2	...	1	...	...	...	...	...	1	6	3	7	...
...	...	...	1	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
...	...	1	1	1	...	...	2	1	...	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...
...	...	1	...	...	...	...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...
...	...	...	...	...	...	...	3	4	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	...	...	4	...	...	...	7	2	...	6	1	...	1	...	...	...	...	2	...	...	...	...	1	3	1	...
1	...	1	3	2	...	...	6	4	...	8	...	...	...	1	...	...	1	...	...	...	...	...	6	3	3	...
...	...	2	2	...	1	...	...	5	...	...	1	...	1	2	...	...	...	1	...	...	...	...	4	1	4	...
...	...	...	1	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	1	...	...	...	2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	1	1	...	...	2	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	6	...
...	...	...	...	...	...	...	2	4	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...
...	1	5	9	2	...	...	18	10	...	16	4	...	2	3	...	...	...	...	...	1	1	1	12	3	5	...
...	...	1	4	...	...	...	4	1	...	3	1	...	...	1	...	1	...	...	...	...	...	...	...	5	...	...
1	...	1	2	...	...	...	5	2	...	6	...	...	1	...	...	...	...	...	...	...	...	...	2	...	1	...
...	...	1	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
1	...	2	1	...	...	...	2	1	...	...	...	...	...	3	...	...	...	...	...	...	...	...	1	...	...	1
...	...	...	1	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	4	2	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...
...	...	2	2	...	...	...	4	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...
...	...	1	...	...	...	...	3	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...
...	...	...	2	...	...	...	2	1	...	1	1	...	...	...	...	1	...	...	...	...	...	...	2	...	...	...
...	1	1	1	...	...	...	3	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...
...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...

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TABLE 27.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES

THE YEAR ENDING

DEATHS IN KEARNY.	AGE PERIODS.												
	Under one month	Under 1 yr. "not including under 1 mo."	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty--twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Bright's Disease 120	1	....	....	..	1	..	..	..	..	1	..	..
Diseases of the Bladder 124	....	....	....	..	..	..	..	..	..	....	..	..
Other Diseases of the Urethra, Urinary abscess, etc. ..125	....	....	....	..	..	..	..	..	..	....	..	..
Cysts and Other Tumors of the Ovary 131	....	....	....	..	..	..	..	..	..	....	..	..
Accidents of Pregnancy 134	....	....	....	..	..	..	..	2	..	....	..	..
Puerperal Phlegmasia Alba Dolens, Embolus, Sudden Death ..139	....	....	....	..	..	..	..	1	..	....	..	..
Gangrene 142	....	....	....	..	..	..	..	..	..	....	..	..
Congenital Debility, Icterus, and Sclerema...151	12	2	....	..	..	..	..	..	..	....	..	..
Other Diseases Peculiar to Early Infancy....152	1	1	....	..	..	..	..	..	..	....	..	..
Senility 154	....	....	....	..	..	..	..	..	..	....	..	..
Suicide by Hanging or Strangulation 157	....	....	....	..	..	..	..	..	..	1	..	..
Suicide by Cutting or Piercing Instruments..160	....	....	....	..	..	..	..	..	..	....	..	..
Burns (conflagration excepted) 167	....	....	....	1	..	..	..	..	..	....	..	..
Absorption of Deleterious Gases (conflagration excepted) ..168	....	....	....	..	..	..	..	..	..	....	..	..
Accidental Drowning 169	....	....	....	..	..	1	..	..	..	....	..	..
Traumatism by Fall 172	....	....	....	..	..	..	..	..	..	1	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) ..175	....	....	....	..	..	..	1	1	..	....	1	..
Effects of Heat 179	....	....	....	..	..	..	..	..	..	....	..	..
Cause of Death Not Specified or Ill-defined..189	....	....	....	..	..	..	..	..	..	1	..	..

Total deaths, 267. Death-rate, 12.57.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911. —*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
	2	5	3	1			12	2		6	2		1			3	1	1					5	2	7	
			2				2			2														1	1	
			1				1						1												1	
			1					1														1			1	
								2		1				1									2			
								1								1							1			
			1	1			2			2															2	
							6	8		14														14		
							1	1		2														2		
		1	2				2	1		2		1												1	2	
							1												1				1			
1								1		1													1			
								1		1														1		
1							1			1													1			
							1			1					1				1					1		
					1		1	1											1				1		1	
							2								1						1	1	1	2		
			2				2			2														1	1	
							1										1						1			

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TABLE 28.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASE, THE YEAR ENDING

DEATHS IN LAMBERTVILLE		AGE PERIODS.									
		Under one month	Under 1 yr. "not including under 1 mo."	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Including Croup	9A	..	..	..	..	1	..	..	..	..	..
Tuberculosis of the Lungs	28	..	..	..	..	..	..	2	1	..	1
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Female Genital Organs.	42	..	..	..	..	..	..	..	..	..	..
Acute Articular Rheumatism	47	..	..	..	..	..	..	..	..	..	..
Simple Meningitis	61	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Spinal Cord	63	..	..	..	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	..	..	..	..	..	..	..	..	..	..
Softening of the Brain	65	..	..	..	..	..	..	..	..	..	..
Paralysis Without Specified Cause	66	..	..	..	..	..	..	..	..	..	..
Convulsions of Infants	71	..	..	1	..	..	..	..	..	..	..
Acute Endocarditis	78	..	..	..	..	..	..	..	..	..	..
Organic Diseases of the Heart	79	..	..	..	..	..	..	..	..	..	1
Angina Pectoris	80	..	..	..	..	..	..	..	..	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	..	..	..	..	..	..
Diseases of the Larynx	87	..	..	..	..	..	..	..	..	..	..
Chronic Bronchitis	90	..	..	..	..	..	..	..	..	..	..
Pneumonia	93	..	..	..	1	..	..	..	..	..	..
Pulmonary Congestion, Pulmonary Apoplexy	94	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Mouth and Annexa	99	..	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	..	2	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and under)	105	..	..	..	..	..	..	..	..	..	1
Other Diseases of the Intestines	110	..	..	1	..	..	..	..	..	..	..
Cirrhosis of the Liver	113	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Liver	115	..	..	..	..	..	..	..	..	..	1
Bright's Disease	120	..	..	..	..	..	..	..	1	..	..
Diseases of the Bones (tuberculosis excepted)	146	..	..	..	..	..	..	..	..	..	1
Other Diseases Peculiar to Early Infancy	152	1	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..
Accidental Drowning	169	..	..	..	1	..	..	..	..	..	..
Cause of Death not Specified or Ill-defined	189	..	1	..	..	..	..	..	..	..	..

Total deaths, 53. Death-rate, 11.56.

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AGE PERIODS.								SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	1	..	1	1	..	..	..	2	5	1	7	..	..	..	..	..	..	..	..	..	..	..	..	5	2	...	....
..	..	1	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
..	1	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
1	..	..	..	..	1	..	..	..	2	..	.....	....	..	..	..	1	..	..	..	..	..	..	..	..	2	....	...	...
..	..	..	..	1	..	..	..	..	1	..	.....	....	..	..	..	..	..	..	..	..	..	..	..	1	....	....	1	...
..	..	..	..	..	1	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
..	..	..	..	4	4	1	..	..	4	5	.....	8	..	..	1	..	..	..	..	..	..	..	..	..	4	....	5	...
..	..	..	..	..	1	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
..	..	..	..	..	1	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
..	..	..	1	..	1	..	..	..	1	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	..	1	..	..	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...
..	..	..	..	..	..	1	..	..	1	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	..	..	..	..	1	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	..	..	..	..	1	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	...
..	..	..	..	..	..	1	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	..	..	..	..	1	..	..	1	..	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	1	....	1	...
1	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	...	...
..	..	..	..	..	..	1	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	....	2	...
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	..	..	..	1	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	..	..	..	1	2	..	..	1	2	.....	2	..	..	..	1	..	..	..	..	..	..	..	..	1	....	2	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...

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TABLE 29.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASE, THE YEAR ENDING

DEATHS IN LONG BRANCH.		AGE PERIODS.													
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1					1	1		2	1	1		
Malaria	4												
Scarlet Fever	7		1										
Whooping Cough	8		1	1									
Dysentery	14												
Rabies	23				2								
Tuberculosis of the Lungs	28		1				2	3	3	1	3	3	1
Acute Miliary Tuberculosis	29												
Tuberculous Meningitis	30											1	
Abdominal Tuberculosis	31												
Syphilis	37		2								1		
Cancer and Other Malignant Tumors of the Stomach, Liver	40												1
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum	41												
Cancer and Other Malignant Tumors of the Female Genital Organs	42										1	1	2
Cancer and Other Malignant Tumors of the Breast	43												1
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified	45												
Acute Articular Rheumatism	47												
Diabetes	50												
Addison's Disease	52								1				
Alcoholism (acute or chronic)	56												1
Encephalitis	60										1		
Simple Meningitis	61			1	1								
Including Cerebrospinal Fever	61A			1									
Other Diseases of the Spinal Cord	63											1	
Cerebral Hæmorrhage, Apoplexy	64										1		1
Paralysis Without Specified Cause	66												
Convulsions of Infants	71	1											
Acute Endocarditis	78				1				1		2	1	
Organic Diseases of the Heart	79						1				1		
Angina Pectoris	80												
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81												
Hæmorrhage; Other Diseases of the Circulatory System	85		1										
Acute Bronchitis	89		1										
Chronic Bronchitis	90												
Bronchopneumonia	91		2	1	1								
Pneumonia	92	1		2	1		1	2			2	3	1
Pleurisy	93												
Pulmonary Congestion, Pulmonary Apoplexy	94			1								2	
Ulcer of the Stomach	102												1
Other Diseases of the Stomach (cancer excepted)	103	1	1				1						1
Diarrhœa and Enteritis (under 2 years)	104	1	10										
Diarrhœa and Enteritis (2 years and over)	105			2	2								
Appendicitis and Typhlitis	108				1								1
Hernias, Intestinal Obstructions	109	1		1									
Other Diseases of the Intestines	110		1										
Cirrhosis of the Liver	113												
Other Diseases of the Liver	115												
Simple Peritonitis (nonpuerperal)	117												1
Acute Nephritis	119									1			
Bright's Disease	120					1				1	1		2
Diseases of the Bladder	124										1	1	
Diseases of the Prostate	126												
Uterine Tumor (noncancerous)	129												1

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
	1		1	1			5	4	1	8												1	3	5	1	
		1						1		1															1	
								1		1														1		
							2			2														2		
			1					1		1															1	
							2			2														2		
2		1					13	7	6	16				1						1		2	8	11	1	
2							2															2		1	1	
							1		1	1													1			
		1						1		1															1	
		3	2				3	3		5					1								4	1	1	
			3				1	2		1			1	1									1	1	1	
		2						6	1	6													5		1	
1	2	1						5		4												1	4	1		
	2							2		1						1							1		1	
	1	1						2		1				1									1		1	
1	2						2	1		2					1							3				
								1														1		1		
1	1		1				4			2				1								1	2		1	1
							1			1													1			
							2			2														2		
1							1	1		1										1				1	1	
			1				2			2														2		
4	2	8	5	1	1		14	9	2	16			3	1	2							1	9	4	10	
			2	2			4			2				1		1							4			
							1			1														1		
3	2	1	4	1	1		8	9	3	12		1	1	3									6	6	5	
	1	5	3				4	7	1	8	1		1	1									1	2	8	
			1	2			1	2		3													1		2	
			2				1	1	1	2													1		1	
								1		1														1		
								1		1														1		
			1					1		1														1		
							1	3		3					1								4			
1		3	5	1			11	12	6	14			1	3			1		1		1	2	8	11	4	
	1						1			1													1			
1	1	1					3	3	3	3			1	1							1		3	1	2	
								1		1										1			1			
							2	2	1	3					1								1	3		
							3	8	1	11														11		
	2		2				6	2	2	7			1										1	5	2	
							1	1	1	2													1	1		
	1						2	1		3														2	1	
	1						1	1		1			1											2		
1							1			1													1			
				1				1													1		1			
							1			1													1			
							1	1		1								1					2			
1	3	3	3	1			13	3	3	15												1	9	2	5	
1				1			3	1	1	3												1	4			
			1				1			1													1			
								1		1													1			

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TABLE 29.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN LONG BRANCH.	AGE PERIODS.											
	Under one month.	Under 1 yr "not including under 1 mo"	One to five.	Five to ten.	Ten to fifteen.	Fifteen to twenty.	Twenty to twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty.	Forty to forty-five	Forty-five to fifty
Other Diseases of the Uterus 130	....	....	....	..	..	..	..	..	..	....	..	1
Salpingitis and Other Diseases of the Female Genital Organs 132	....	....	....	..	..	..	1	..	..	....	..	..
Puerperal Hæmorrhage 135	....	....	....	..	..	..	1	1	1	....	..	..
Other Diseases of the Skin and Annexa 145	....	....	....	..	..	..	..	..	..	....	..	..
Congenital Debility, Icterus, and Sclerema...151	7	....	....	..	..	..	..	..	..	....	..	..
Other Diseases Peculiar to Early Infancy....152	1	2	....	..	..	..	..	..	..	....	..	..
Senility 154	....	....	....	..	..	..	..	..	..	....	..	..
Suicide by Firearms 159	....	....	....	..	..	..	..	1	..	....	..	..
Burns (conflagration excepted) 167	....	....	....	..	..	..	..	..	..	....	..	..
Accidental Drowning 169	....	....	1	..	..	..	1	..	1	....	..	..
Traumatism by Fall 172	....	....	....	..	..	..	..	..	1	1	1	1
Traumatism by Other Crushing (vehicles, railroad, landslides, etc. 175	....	....	1	..	1	1	..	..	..	....	..	..
Homicide by Firearms 182	....	....	....	..	..	..	1	..	1	....	..	..
Homicide by Cutting or Piercing Instruments..183	....	....	....	..	..	..	1	..	..	....	..	..
Homicide by Other Means 184	1	....	....	..	..	..	..	..	..	....	..	..
Cause of Death Not Specified or Ill-defined...189	....	2	....	..	..	..	..	..	..	....	..	..

Total deaths, 284. Death-rate, 21.00.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
		1						1		1																
								1	1	1																
		1					1		1	1					1											
							6	1	3	7								1	1			1				
							2	1	1	2																
		1	1	1			1	2		1																
							1			1					2											
			1				1			1													1			
						1	3	1		2																
2			1				5	2	1	5	1			1	1											
2		1					4	2		5			1	1					1			1		4			1
														1										1	2	
							1	1	1	2																
							1			1					1									1			
							1			1																	
	1						2	1		2															1		

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TABLE 30.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN MILLVILLE		AGE PERIODS.											
		Under one month.	Under 1 year "not including under one month"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Typhoid Fever	1					1					
Scarlet Fever	7				1			1			
Diphtheria and Croup	9			5	3						
Including Croup	9A				1						
Tuberculosis of the Lungs	23						1	1		3	1
Abdominal Tuberculosis	31						1				
Tuberculosis of Other Organs	34										1
Cancer and Other Malignant Tumors of the Buccal Cavity	39										
Cancer and Other Malignant Tumors of the Stomach, Liver	40										
Cancer and Other Malignant Tumors of the Female Genital Organs.	42										
Acute Articular Rheumatism	47										1
Other General Diseases	55		1								
Alcoholism (acute or chronic)	56						1				
Other Chronic Poisonings	59									1	
Simple Meningitis	61										
Other Diseases of the Spinal Cord	62			1							
Cerebral Hæmorrhage, Apoplexy	64										
Paralysis Without Specified Cause	66										
Other Forms of Mental Alienation	68										
Epilepsy	69			1							
Convulsions of Infants	71		1								
Acute Endocarditis	78					1					
Organic Diseases of the Heart	79				1						
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81										
Acute Bronchitis	89		1								
Chronic Bronchitis	90										
Pneumonia	92	1	2					3	1		
Pulmonary Congestion, Pulmonary Apoplexy	94										
Asthma	96										
Other Diseases of the Stomach (cancer excepted)	103										
Diarrhœa and Enteritis (under 2 years)	104		6	3							
Diarrhœa and Enteritis (2 years and over)	105										
Appendicitis and Typhlitis	108										
Cirrhosis of the Liver	113										
Other Diseases of the Liver	115						1				
Bright's Disease	120									3	1
Puerperal Hæmorrhage	125										1
Gangrene	142										
Congenital Debility, Icterus, and Sclerema	151	9	1								
Other Diseases Peculiar to Early Infancy	152		2								
Senility	154										
Suicide by Firearms	159										
Other Acute Poisonings	165		1								
Accidental Drowning	169						1	1			
Traumatism by Fall	172										1
Cause of Death not Specified or Ill-defined	189		1								

Total deaths, 166. Death-rate, 11.59.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.								SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
				1					1	1		2													1	1		
										2		2														2		
									5	3		8														8		
										1		1														1		
1	2	1	2	3	2				8	9	3	16			1										12	2	3	
									1			1															1		
									1			1														1			
			1						1			1														1			
1	1			6	1				4	5	1	8	1													4		5	
			1							1		1																1	
										1		1														1			
										1		1														1			
										1		1														1			
									1			1														1			
				1					1			1		1												1			
				1					2			2															1	1	
			2	3	1		1		4	3		7														4		3	
		1	1	7	1	1			8	3		10			1											6	1	4	
					1					1		1																1	
									1			1															1		
										1		1															1		
				1					2			2														1	1		
1			1	2	7	1			4	9	1	12				1										7	1	5	
				1					1			1																1	
									1		1	1															1		
		1							1			1															1		
		2		1	1				5	6		11														6	5		
		1		2		1			1	3		3												1		2		2	
					1		1		1	1	1	1	1													1		1	
				1					1			1														1			
									4	5		9																	
					1					1		1															1		
	1								1			1														1			
					1				1			1														1			
										1								1								1			
1	2		1	5	4				11	6	2	16				1										12	2	3	
										1		1														1			
					1				1			1																1	
									6	4		10															10		
										2	1	2															2		
				1	5		1		4	3		6				1										2		5	
			1						1			1														1			
										1	1	1															1		
									2			1												1		1	1		
						2			2	1		3															2	1	
										1		1															1		

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TABLE 31.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES

THE YEAR ENDING

DEATHS IN MONTCLAIR.	AGE PERIODS.												
	Under one month	Under 1 year "not including under 1 mo."	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1					1		1			1	1	
Whooping Cough 8		5	2	1								
Diphtheria and Croup 9			1									
Influenza 10												
Purulent Infection and Septichæmia 20									1		2	
Tuberculosis of the Lungs 28						1	5	4	3	3	4	2
Acute Miliary Tuberculosis 29											1	
Tuberculous Meningitis 30		1							1			
Abdominal Tuberculosis 31											1	
Disseminated Tuberculosis 35		1										
Rickets 36		5	1									
Syphilis 37		1										
Cancer and Other Malignant Tumors of the Stomach, Liver 40												
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum 41											1	1
Cancer and Other Malignant Tumors of the Female Genital Organs 42												
Cancer and Other Malignant Tumors of the Breast 43												
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified 45									1			1
Anæmia, Chlorosis 54												
Alcoholism (acute or chronic) 56												
Simple Meningitis 61				1					1			
Other Diseases of the Spinal Cord 63												
Cerebral Hæmorrhage, Apoplexy 64						2						
Paralysis Without Specified Cause 66												1
Convulsions (nonpuerperal) 70												
Acute Endocarditis 78										1		1
Organic Diseases of the Heart 79								1				
Angina Pectoris 80												
Diseases of the Arteries, Atheroma, Aneurysm, etc. 81								1				
Embolism and Thrombosis 82												
Acute Bronchitis 89	1											
Bronchopneumonia 91		3	3									
Pneumonia 92		3	1		1	2			1		2	2
Pleurisy 93		1				1						
Pulmonary Congestion, Pulmonary Apoplexy 94									1			1
Asthma 96				1								
Diseases of the Pharynx 100				1								
Other Distases of the Stomach (cancer excepted) 103	1	5	1									
Diarrhœa and Enteritis (under 2 years) 104	2	13	2									
Diarrhœa and Enteritis (2 years and over) 105										1		
Appendicitis and Typhilitis 108			1					1	1			1
Hernias, Intestinal Obstructions 109										2		
Other Diseases of the Intestines 110	1											
Cirrhosis of the Liver 113											1	
Other Diseases of the Liver 115												
Simple Peritonitis (nonpuerperal) 117												
Acute Nephritis 119								1				
Bright's Disease 120							1			3	1	2
Other Diseases of the Kidneys and Annexa 122												
Diseases of the Bladder 124								1				
Diseases of the Prostate 126												
Salpingitis and Other Diseases of the Female Genital Organs 132										1		
Puerperal Hæmorrhage 135								1				
Puerperal Septichæmia 137							1		1			

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
							3	1		3											1		2	2		
							2	6	6	8														8		
							1			1														1		
					1			1		1															1	
		1					3	1		4															2	2
		1					13	10	7	18			2	2	1								15	6	3	
								1		1													1			
								3		1				1										2		
								1		1													1			
							1			1														1		
							4	2	1	6														6		
							1			1														1		
1	2	1	1				2	3	1	4				1									3		2	
				2			1	3		4													2		2	
1								1			1														1	
		1	1	1			1	2		2	1												1		2	
		1					2	1		1	1				1							1	2	1		
	1	1					1	1		1												1	2			
		1					1							1									1			
	2						2	2	1	3				1									2	2		
		1					1			1															1	
3	2	3	3	6			11	18	3	22	1		1	4	1								6	4	19	
		1	1	1			1	3		4													2	1	1	
			1					1		1													1			
		6	2	3			10	5		7			1	4		2		1					3	1	6	
2		1	3	2			4	5		6	1		1		1								3	1	5	
	1						1			1													1			
	2		4				1	6	1	3			1	2	1								4		3	
				1				1		1															1	
	1		1				1	2		2				1										2	1	
		1	2				4	5		7					2								1	6	2	
1	3	3	1	2			12	11	5	13			2	3	2			1				2	11	10	2	
							1	2	1	2														2	1	
		1	1	1			1	4		3	1							1					3		2	
			1				2		1	2													1	1		
								1																1		
	1			1			5	4	1	9													1	8		
							11	6	7	17					2									17		
		1						2															1		1	
							4			4													3	1		
1	1	1	1				2	4	1	5	1												3		3	
		1						2	1	2													1	1		
1							2			2													2			
1							1	1		1													1			
							1				1												1			
								1		1											1		1			
1	1	2	4	1			6	11	2	12	3		1		1								11	4	2	
	1		1				1	1		1	1												1		1	
		1					2		1	2													1		1	
			1				1			1															1	
								1		1													1			
								1		2										1			1			
								2	1	2													2			

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TABLE 31.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES
THE YEAR ENDING

DEATHS IN MONTCLAIR.	AGE PERIODS.												
	Under one month	Under 1 Year "not including under one month"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-five to thirty	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Puerperal Albuminuria and Convulsions 138	....	....	....	....	....	....	1	....	1	....	....	....
Puerperal Phlegmasia Alba Dolens, Embolus, Sudden Death 139	....	....	....	....	....	....	....	....	1	....	....	....
Gangrene 142	....	....	....	....	....	....	....	....	....	....	....	....
Congenital Malformations (stillbirths not included) 150	....	1	....	....	....	....	....	....	....	....	....	....
Congenital Debility, Icterus, and Sclerema....151	17	1	....	....	....	....	....	....	....	....	....	....
Other Diseases Peculiar to Early Infancy....152	2	....	....	....	....	....	....	....	....	....	....	....
Senility 154	....	....	....	....	....	....	....	....	....	....	....	....
Suicide by Poison 155	....	....	....	....	....	....	....	....	....	....	....	....
Suicide by Asphyxia 156	....	....	....	....	....	....	....	....	....	....	....	....
Burns (conflagration excepted) 167	....	....	2	1	....	1	....	....	1	....	....	....
Absorption of Deleterious Gases (conflagration excepted) 168	....	....	....	....	....	....	....	....	....	....	....	....
Traumatism by Fall 172	....	....	....	....	1	....	....	....	....	1	....	1
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) 175	....	....	....	....	1	....	....	....	1	....	....	1
Injuries by Animals 176	....	....	....	....	....	....	....	....	....	....	....	1
Effects of Heat 179	....	....	....	....	....	....	1	....	....	....	....	....
Homicide by Cutting or Piercing Instruments..183	....	....	....	....	....	....	....	1	....	....	....	....
Homicide by Other Means 184	1	....	....	....	....	....	....	....	....	....	....	....
Cause of Death Not Specified or Ill-defined...189	....	2	....	....	....	....	....	....	....	....	....	....

Total deaths, 313. Death-rate, 13.86.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	...	2	1	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
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1	1	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	.....	2	...	...
1	...	1	...	...	...	...	1	6	1	6	...	...	...	2	...	...	...	...	...	...	...	...	1	6	...	...
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...	...	...	...	...	1	...	2	...	.....	2	...	...	1	...	...	...	...	...	...	...	...	...	2	.....	1	...
...	...	1	...	...	...	...	2	1	1	2	...	...	...	...	1	...	...	...	...	...	...	...	2	1	...	...
...	1	...	...	...	...	...	2	...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	2	.....	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	...	...	...	...	1	...	.....	...	...	...	...	...	1	...	...	...	...	...	...	...	1	.....	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	1	...	...	...	1	2	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...

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TABLE 32.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES

THE YEAR ENDING

DEATHS IN MORRISTOWN.		AGE PERIODS.										
		Under one month	Under 1 year "not including under one month	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Typhoid Fever	1	..	..	..	..	..	2	..	..	1	..
Malaria	4	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	7	..	..	1	1	1	..	..	..	..	..
Whooping Cough	8	..	2	2	..	..	..	..	..	..	..
Diphtheria and Croup	9	..	..	5	1	..	..	..	..	..	..
Including Croup	9A	..	..	..	..	1	..	..	..	..	..
Influenza	10	..	..	..	..	..	..	..	..	..	..
Tuberculosis of the Lungs	28	..	1	..	..	..	..	5	4	3	2
Tuberculous Meningitis	30	..	1	1	1	2	..	..	..	..	..
Abdominal Tuberculosis	31	..	..	2	..	..	..	..	..	1	..
Disseminated Tuberculosis	35	..	..	..	..	..	1	..	..	..	..
Syphilis	37	..	1	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the buccal cavity	39	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Peritoneum, Intestines, Rectum.	41	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Female Genital Organs.	42	..	..	..	..	..	..	..	..	..	1
Cancer and Other Malignant Tumors of the skin	44	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified.	45	..	..	..	..	..	..	..	..	..	..
Other Tumors (tumors of the female genital organs excepted).	46	..	..	..	..	..	..	..	..	..	..
Acute Articular Rheumatism	47	..	..	..	..	..	..	1	..	..	..
Diabetes	50	..	..	..	..	..	..	..	..	1	..
Anæmia, Chlorosis	54	..	..	..	..	..	..	..	..	..	..
Other General Diseases	55	..	..	..	..	1	..	..	..	..	..
Encephalitis	60	..	..	..	..	..	..	1	..	..	..
Simple Meningitis	61	..	..	1	..	..	..	..	..	..	..
Including Cerebrospinal Fever	61A	..	..	..	..	..	..	1	..	..	..
Other Diseases of the Spinal Cord	63	..	..	..	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	..	..	..	..	..	..	..	..	..	..
Paralysis Without Specified Cause	66	..	..	..	..	..	..	..	..	..	..
Other Forms of Mental Alienation	68	..	..	..	..	..	..	..	..	..	..
Epilepsy	69	..	..	..	..	..	..	..	..	1	..
Diseases of the Ears	76	..	..	..	1	..	..	..	..	..	..
Pericarditis	77	..	..	..	..	..	..	..	..	..	..
Acute Endocarditis	78	..	..	..	..	1	..	..	1	..	..
Organic Diseases of the Heart	79	..	..	..	..	..	..	..	1	..	..
Angina Pectoris	80	..	..	..	..	..	..	..	..	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	..	..	..	..	..	..
Diseases of the Veins (varices, hæmorrhoids, phlebitis, etc.)	83	..	..	..	..	..	..	..	..	..	..
Diseases of the Larynx	87	..	1	..	..	..	..	..	..	..	..
Acute Bronchitis	89	..	..	..	..	..	..	..	..	..	..
Bronchopneumonia	91	..	1	3	..	..	..	..	..	..	..
Pneumonia	92	..	6	1	..	..	..	2	..	1	4
Pleurisy	93	..	..	..	..	..	..	..	..	..	..
Asthma	96	..	..	..	..	..	..	..	..	..	..
Ulcer of the Stomach	102	..	..	1	..	1	..	1	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	1	8	1	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	..	..	..	..	..	..	..	..	..	..
Appendicitis and Typhlitis	106	..	..	..	..	..	..	1	..	..	..
Hernias, Intestinal Obstructions	109	..	..	..	..	..	..	..	..	..	..
Cirrhosis of the Liver	113	..	..	..	..	..	..	..	..	1	..
Other Diseases of the Liver	115	..	..	..	..	..	..	..	..	..	..

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IN THE STATISTICAL DIVISION OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	1	..	..	..	..	..	..	..	3	1	.....	2	2	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	...
..	..	..	1	..	..	..	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
..	..	..	..	..	..	..	..	..	2	1	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	....	3	..	...
..	..	..	..	..	..	..	..	..	1	3	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	....	4	..	...
..	..	..	..	..	..	..	..	..	2	4	.....	6	..	..	..	..	..	..	..	..	..	..	..	..	..	....	6	..	...
..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
..	..	..	..	..	1	2	..	..	1	2	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	2	...
2	..	..	1	3	..	..	..	..	12	9	2	15	..	..	..	1	2	..	..	..	1	..	2	..	..	7	11	3	...
..	..	..	..	..	..	..	..	..	2	3	.....	4	..	..	..	..	1	..	..	..	..	..	..	..	..	....	5	..	...
..	..	..	..	1	..	..	..	..	2	2	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	...
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..	..	1	1	1	..	..	..	..	1	2	.....	2	..	..	..	..	1	..	..	..	..	..	..	..	..	3	....	..	...
..	..	..	1	3	1	..	..	..	3	2	.....	4	..	..	..	1	..	..	..	..	..	..	..	..	..	3	....	2	...
..	..	1	..	3	..	..	..	..	..	5	1	4	..	..	..	1	..	..	..	..	..	..	..	..	..	5	....	..	...
..	..	..	..	1	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
..	1	..	1	1	..	..	..	..	1	2	.....	2	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	...
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..	..	..	..	..	2	1	..	..	..	3	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	2	...
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1	..	..	..	1	3	1	..	..	3	5	.....	7	..	..	..	..	..	1	..	..	..	..	..	..	..	3	4	1	...
..	1	1	2	4	3	2	..	..	7	7	3	9	1	..	1	2	..	..	1	..	..	..	..	..	..	6	4	4	...
..	..	..	1	..	2	2	..	..	4	1	.....	5	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	2	...
..	..	..	..	1	2	1	..	..	3	1	.....	3	..	..	..	..	1	..	..	..	..	..	..	..	..	2	....	2	...
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..	..	..	..	2	1	..	..	..	1	6	.....	5	1	..	..	..	..	..	..	..	1	..	..	..	..	5	....	2	...
3	..	1	2	1	7	2	..	..	14	16	2	19	1	..	..	4	8	1	..	..	..	..	1	1	..	12	9	7	2
1	..	..	..	1	..	..	..	..	1	1	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	..	...
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..	..	..	1	..	..	..	..	..	2	2	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	..	...
..	..	2	..	2	1	..	..	..	5	5	1	10	..	..	..	..	..	..	..	..	..	..	..	..	..	....	10	..	...
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..	..	..	..	1	1	..	..	..	....	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...
1	..	1	..	..	..	..	..	..	2	1	1	2	..	..	..	1	..	..	..	..	..	..	..	..	..	2	1	..	...
1	..	..	..	..	1	..	..	..	....	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...

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TABLE 32.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES

THE YEAR ENDING

DEATHS IN MORRISTOWN.		AGE PERIODS.										
		Under one month	Under 1 year "not including under one month	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Simple Peritonitis (nonpuerperal)	117	..	..	..	..	..	..	..	..	..	..
Acute Nephritis	119	..	..	..	..	..	..	..	..	..	..
Bright's Disease	120	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Kidneys and Annexa	122	..	..	..	..	..	..	..	..	..	1
Diseases of the Bladder	124	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Urethra, Urinary Abscess, etc.	125	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Uterus	130	..	..	..	..	..	..	..	..	..	..
Accidents of Pregnancy	134	..	..	..	..	..	..	..	..	1	..
Puerperal Hæmorrhage	135	..	..	..	..	..	..	..	..	1	..
Puerperal Albuminuria and Convulsions	138	..	..	..	..	..	..	..	2	2	..
Gangrene	142	..	..	..	..	..	..	..	..	..	..
Diseases of the Bones (tuberculosis excepted)	146	..	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	18	1	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	4	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..
Suicide by Firearms	159	..	..	..	..	..	..	..	..	..	..
Conflagration	166	..	..	..	..	..	..	..	..	..	..
Burns (conflagration excepted)	167	..	..	2	..	..	..	..	1	2	..
Accidental Drowning	169	..	..	..	..	..	..	..	..	..	1
Traumatism by Firearms	170	..	..	..	..	..	1	..	..	..	..
Traumatism by Fall	172	..	..	..	..	..	..	..	..	1	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	..	..	..	..	..	..	1	1	..	..
Effects of Heat	179	..	..	..	..	..	..	..	..	..	..
Homicide by Firearms	182	..	..	..	..	..	..	..	..	..	1
Homicide by Cutting or Piercing Instruments	183	..	..	..	..	..	..	..	..	1	..
Cause of Death not Specified or Ill-defined	199	..	14	..	..	..	..	..	..	..	..

Total deaths, 293. Death-rate, 23.29.

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IN THE STATISTICAL DIVISION OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.									SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	1	..	..	..	..	..	..	1	..	.....	....	..	..	..	1	..	..	..	..	..	..	..	..	1	....	....	...
..	1	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	....	...
..	..	2	..	4	5	1	..	..	6	6	1	6	..	..	..	5	1	..	..	..	..	..	..	..	6	3	2	1
..	..	..	..	..	..	..	..	..	1	..	.....	....	..	..	..	1	..	..	..	..	..	..	..	..	1	....	....	...
..	..	..	..	1	..	..	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	...
1	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	....	...
..	..	1	..	..	..	..	..	..	..	1	.....	....	1	..	..	..	..	..	..	..	..	..	..	..	1	....	....	...
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	....	...
..	..	..	..	..	..	..	..	..	..	1	.....	....	..	..	..	1	..	..	..	..	..	..	..	..	....	....	1	...
..	..	..	..	..	..	..	..	..	..	4	1	3	..	..	..	..	..	..	1	..	..	..	..	..	4	....	....	...
..	..	..	..	..	1	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	....	...
1	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	....	...
..	..	..	..	..	..	..	..	..	8	6	4	14	..	..	..	..	..	..	..	..	..	..	..	..	....	14	....	...
..	..	..	..	..	..	..	..	..	4	..	1	4	..	..	..	..	..	..	..	..	..	..	..	..	....	4	....	...
..	..	..	..	1	3	2	2	..	2	6	1	6	1	..	..	1	..	..	..	..	..	..	..	..	....	1	7	...
1	..	..	..	..	..	..	..	..	1	..	.....	....	..	..	..	..	1	..	..	..	..	..	..	..	....	....	1	...
..	..	..	..	..	1	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	...
..	..	..	1	..	..	1	..	..	3	4	1	7	..	..	..	..	..	..	..	..	..	..	..	..	2	4	1	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	....	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	....	...
..	..	..	..	..	1	..	..	..	2	..	.....	1	..	..	..	..	1	..	..	..	..	..	..	..	2	....	....	...
1	1	1	1	1	..	..	..	..	7	..	.....	3	..	..	1	1	2	..	..	..	..	..	..	..	4	2	..	1
..	1	..	..	1	..	..	..	..	1	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...
..	..	..	..	..	..	..	..	..	1	..	.....	....	..	..	..	..	1	..	..	..	..	..	..	..	1	....	....	...
..	..	..	..	..	..	..	..	..	1	..	.....	....	..	..	..	..	1	..	..	..	..	..	..	..	1	....	....	...
..	..	..	..	..	..	..	..	..	9	5	.....	14	..	..	..	..	..	..	..	..	..	..	..	..	....	14	....	...

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TABLE 33.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES

THE YEAR ENDING

DEATHS IN NEWARK.		AGE PERIODS.												
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1	..	..	..	1	1	6	3	3	4	5	5	..
Malaria	4	..	..	..	..	..	..	1	1	..	..	..	..
Measles	6	..	5	20	1	..	..	..	..	..	..	..	..
Scarlet Fever	7	..	2	21	9	..	1	1	..	..	..	..	..
Whooping Cough	8	..	15	30	1	1	..	..	..	..	..	..	..
Diphtheria and Croup	9	1	6	34	19	..	..	..	..	..	1	..	..
Including Croup	9A	..	..	7	..	..	..	..	..	..	..	..	..
Influenza	10	..	..	..	..	..	..	1	..	..	..	..	..
Dysentery	14	2	5	3	..	..	..	..	..	..	..	..	..
Erysipelas	18	3	3	..	..	..	..	..	1	..	..	1	1
Purulent Infection and Septichæmia	20	..	..	..	1	..	..	..	..	..	..	..	..
Tetanus	24	..	..	..	2	..	..	..	..	..	..	..	..
Pellagra	26	..	..	..	..	..	..	..	..	..	..	1	..
Tuberculosis of the Lungs	28	..	6	8	4	9	40	76	80	83	107	74	53
Acute Miliary Tuberculosis	29	..	2	2	1	..	2	1	..	2	3	..	..
Tuberculous Meningitis	30	1	7	26	6	..	..	1	..	2	1	..	1
Abdominal Tuberculosis	31	..	1	4	2	2	3	3	..	2	1	..	1
Potts Disease	32	..	..	..	..	..	..	..	..	1	..	..	..
Tuberculosis of Other Organs	34	..	..	2	4	..	1	..	2	2	2	2	3
Disseminated Tuberculosis	35	..	..	..	..	..	1	1	2	..	..	1	..
Rickets	36	..	1	..	..	..	..	..	..	..	..	..	..
Syphilis	37	2	2	..	..	..	..	..	..	..	1	..	..
Gonococcus Infection	38	..	..	..	..	..	..	..	..	..	2	..	..
Cancer and Other Malignant Tumors of the Buccal Cavity	39	..	..	..	1	..	..	..	..	..	..	2	1
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	..	..	2	6	11	5
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum	41	..	..	..	..	..	..	..	..	1	1	3	4
Cancer and Other Malignant Tumors of the Female Genital Organs	42	..	..	..	..	..	..	..	..	1	6	8	10
Cancer and Other Malignant Tumors of the Breast	43	..	..	..	..	..	..	..	..	..	..	2	1
Cancer and Other Malignant Tumors of the Skin	44	..	..	..	..	..	..	..	..	..	..	..	1
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified	45	..	1	..	..	1	..	1	..	..	1	1	2
Other Tumors (tumors of the female genital organs excepted)	46	..	..	..	..	..	..	1	..	..	..	1	1
Acute Articular Rheumatism	47	..	1	1	..	1	..	..	..	..	..	..	1
Scurvy	49	..	..	..	..	..	..	..	..	..	..	..	..
Diabetes	50	..	..	..	..	..	1	2	2	..	2	2	2
Exophthalmic Goitre	51	..	..	..	..	..	..	1	..	1	..	..	..
Leuchæmia	53	..	..	..	..	..	1	1	2	2	1	1	..
Anæmia, Chlorosis	54	..	..	1	..	..	..	..	..	..	1	..	..
Other General Diseases	55	1	..	1	..	..	..	..	..	..	..	..	1
Alcoholism (acute or chronic)	56	..	..	..	..	..	..	1	2	6	13	8	6
Chronic Lead Poisoning	57	..	..	..	..	..	..	..	..	1	..	..	..
Encephalitis	60	..	..	1	..	..	..	1	..	..	..	..	1
Simple Meningitis	61	2	13	13	3	..	1	2	4	..	3	1	..
Including Cerebrospinal Fever	61A	..	4	6	3	1	1	2	..	..	1	..	..
Locomotor Ataxia	62	..	..	..	..	..	..	..	..	1	..	1	..
Other Diseases of the Spinal Cord	63	1	..	1	1	2	..	1	1	..	2	3	1
Cerebral Hæmorrhage, Apoplexy	64	2	2	2	1	..	..	3	1	2	12	7	14
Softening of the Brain	65	..	..	..	..	..	..	..	..	..	3	1	..
Paralysis Without Specified Cause	66	..	..	..	..	..	..	..	..	..	..	2	..
Other Forms of Mental Alienation	68	..	..	..	..	..	2	..	..	..	..	..	2
Epilepsy	69	..	1	1	..	..	2	..	1	..	2	1	..
Convulsions of Infants	71	15	13	9	..	..	..	..	..	..	..	..	..
Chorea	72	..	..	..	..	..	..	..	1	..	..	..	..
Neuralgia and Neuritis	73	..	..	..	..	..	..	..	..	..	1	..	1

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IN THE STATISTICAL DIVISION OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
2	1	3	1	...	...	...	27	13	2	24	3	..	2	2	3	..	2	..	1	..	3	..	18	18	4	...
...	...	...	...	...	...	...	2	...	.....	1	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	...
...	...	...	...	...	...	...	16	10	1	26	...	...	...	...	...	...	...	...	...	...	...	...	...	26	...	...
...	...	...	...	...	...	...	18	16	1	33	...	...	1	...	...	...	...	...	...	...	...	...	1	33	...	...
...	...	...	...	...	...	...	26	21	6	47	...	...	...	...	...	...	...	...	...	...	...	...	...	47	...	...
...	...	...	...	...	...	...	29	32	.....	61	...	...	...	...	...	...	...	...	...	...	...	...	1	60	...	...
...	...	...	...	...	...	...	6	1	.....	7	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...
...	...	1	3	2	...	...	2	5	.....	3	...	...	1	2	1	...	...	...	...	...	...	...	1	...	6	...
...	...	...	1	...	...	...	5	6	2	11	...	...	...	...	...	...	...	...	...	...	...	...	1	10	...	...
1	3	...	1	1	1	..	8	8	.....	9	1	..	4	1	1	...	...	...	...	...	...	...	5	6	5	...
...	...	2	...	...	...	...	1	2	1	1	...	...	1	...	1	...	...	...	...	...	...	...	1	1	1	...
...	...	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
48	47	28	8	...	...	...	459	212	49	443	18	1	53	51	28	4	27	1	28	..	11	6	317	287	65	2
1	...	...	...	...	...	...	6	8	2	12	...	...	...	...	1	...	...	...	1	...	...	...	3	11	...	...
...	...	...	1	...	...	...	27	19	2	40	...	...	1	...	3	...	...	...	...	...	1	1	4	40	...	2
2	1	1	...	...	...	...	16	6	6	16	...	...	...	2	3	...	...	...	1	...	...	...	2	18	2	...
...	...	...	...	...	...	...	1	...	.....	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	1	...	...	9	10	5	13	...	...	1	...	2	...	...	...	2	..	1	..	10	8	1	...
...	...	...	...	...	...	...	3	2	.....	2	1	...	...	1	1	...	...	...	...	...	...	...	1	3	...	1
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
1	...	...	...	...	...	...	3	3	.....	6	...	...	...	...	...	...	...	...	...	...	...	...	1	4	1	...
...	...	...	...	...	...	...	1	1	1	1	...	...	...	...	...	...	1	...	...	...	...	...	2	...	...	...
3	1	3	5	...	...	...	14	2	.....	9	...	...	3	2	1	...	...	...	...	...	1	..	8	5	3	...
22	19	28	16	5	...	..	51	63	4	41	10	..	25	12	2	3	6	..	11	..	3	1	64	11	39	...
8	5	9	9	1	...	..	13	28	1	23	4	...	6	5	...	1	1	...	...	...	1	..	22	6	13	...
7	4	11	5	1	...	...	...	53	6	28	1	1	8	9	1	1	2	..	1	...	...	1	32	5	16	...
4	1	7	3	...	...	...	...	18	.....	10	1	1	3	1	...	...	...	...	1	...	...	1	9	2	7	...
2	...	2	1	1	...	..	4	3	.....	2	...	...	4	...	...	...	...	...	1	...	...	...	7	...	...	...
2	4	7	5	1	...	..	16	10	1	13	1	..	4	3	...	1	...	1	1	..	2	..	10	6	10	...
...	...	...	1	...	...	...	2	2	.....	2	...	...	1	...	1	...	...	...	...	...	...	...	2	1	1	...
1	...	2	1	...	...	...	5	3	.....	5	...	...	1	1	...	...	...	...	...	...	...	1	2	3	3	...
...	...	...	1	...	...	...	...	1	.....	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
4	3	15	10	...	...	...	22	21	.....	15	5	...	11	6	2	1	...	...	1	1	1	...	27	4	12	...
...	2	...	...	...	...	...	...	4	.....	2	...	...	...	...	...	1	1	...	...	...	...	...	3	1	...	...
1	...	...	...	...	...	...	5	4	.....	3	...	...	1	...	2	...	1	...	...	...	2	...	7	2	...	...
1	3	1	1	...	...	...	3	5	.....	6	...	...	...	1	...	...	...	...	...	...	1	...	5	1	2	...
...	...	...	...	...	...	...	2	1	.....	2	...	1	...	...	...	...	...	...	...	...	...	...	1	2	...	...
8	4	6	...	...	...	...	49	5	1	26	3	1	11	9	1	1	1	...	...	...	...	1	21	19	11	3
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	2	.....	2	...	...	...	1	...	...	...	...	...	...	...	...	1	2	...	...
...	...	3	1	1	...	..	30	17	2	41	2	...	2	...	1	...	...	...	1	...	...	...	7	36	4	...
...	...	...	...	...	...	...	12	6	.....	12	1	...	...	...	...	...	1	...	2	..	2	...	2	16	...	...
...	1	2	1	...	...	...	4	2	.....	3	1	...	1	1	...	...	...	...	1	...	...	...	4	1	1	...
1	1	5	1	...	...	...	11	9	1	13	2	...	3	1	...	...	...	..	1	...	...	...	7	8	5	...
34	29	90	80	38	6	..	145	178	12	142	16	1	70	51	18	1	6	2	3	..	7	6	136	68	114	5
...	...	...	2	...	...	...	2	4	.....	3	...	...	2	1	...	...	...	...	...	...	...	...	5	2	1	...
2	5	4	...	1	...	...	7	7	1	6	1	...	3	1	...	...	1	...	2	...	...	...	5	1	8	...
...	2	3	2	...	...	...	7	4	1	7	...	...	2	2	...	...	...	...	...	...	...	...	4	3	4	...
...	1	...	...	...	...	...	3	6	.....	7	...	...	1	...	...	...	...	...	...	...	...	1	2	6	...	1
...	...	...	...	...	...	...	19	18	2	36	1	...	...	...	...	...	...	...	...	...	...	...	...	37	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
1	...	...	...	...	...	...	2	1	.....	2	...	...	...	1	...	...	...	...	...	...	...	...	3	...	...	...

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TABLE 33.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES

THE YEAR ENDING

DEATHS IN NEWARK.		AGE PERIODS.													
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-five to thirty	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Other Diseases of the Nervous System	74	..	..	..	..	..	..	..	..	1	..	1	..
Other Diseases of the Eyes and their Adnexa	75	..	..	..	..	..	..	..	..	..	1	..	..
Diseases of the Ears	76	..	1	..	..	..	..	..	..	..	..	..	..
Pericarditis	77	..	..	2	2	..	..	..	..	1	..	..	..
Acute Endocarditis	78	1	3	1	12	8	5	8	11	9	18	16	22
Organic Diseases of the Heart	79	2	2	2	2	4	4	6	6	8	16	17	17
Angina Pectoris	80	..	1	..	..	..	..	..	2	..	..	1	2
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	..	..	..	1	..	1	1	6
Embolism and Thrombosis	82	..	..	..	..	..	..	..	..	1	..	..	..
Diseases of the Veins (varices, hæmorrhoids, phlebitis, etc.)	83	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Lymphatic System (lymphangitis, etc.)	84	1	1	..	..	..	..	..	..	..	..	..	..
Hæmorrhage; Other Diseases of the Circulatory System	85	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Nasal Fossæ	86	..	..	1	..	..	..	..	..	..	..	..	..
Diseases of the Larynx	87	..	2	1	..	..	..	..	..	..	..	..	..
Diseases of the Thyreoid Body	88	..	..	..	..	..	1	..	..	..	..	..	..
Acute Bronchitis	89	7	30	8	..	..	..	..	..	..	1	..	1
Chronic Bronchitis	90	..	..	..	1	..	..	..	..	..	..	1	1
Bronchopneumonia	91	16	89	72	4	1	2	..	1	..	1	3	4
Pneumonia	92	7	44	44	6	4	7	7	15	7	18	24	17
Pleurisy	93	..	2	6	1	..	..	..	1	5	3	1	4
Pulmonary Congestion, Pulmonary Apoplexy	94	2	1	3	1	1	..	..	2	1	1	2	6
Gangrene of the Lung	95	..	..	..	..	..	..	..	..	..	..	1	1
Asthma	96	..	..	..	..	..	..	..	..	..	..	..	1
Pulmonary Emphysema	97	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Respiratory System (tuberculosis excepted)	98	..	..	..	..	..	..	..	1	..	..	..	..
Other Diseases of the Mouth and annexa	99	..	2	..	..	..	..	..	..	..	..	..	..
Diseases of the Pharynx	100	..	1	1	2	..	..	..	..	..	..	..	..
Ulcer of the Stomach	102	..	1	..	..	..	1	1	1	..	..	..	2
Other Diseases of the Stomach (cancer excepted)	103	8	47	4	1	..	2	..	..	..	..	5	1
Diarrhœa and Enteritis (under 2 years)	104	27	312	66	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	..	..	9	4	..	1	..	2	1	1	2	5
Appendicitis and Typhlitis	108	..	1	1	6	2	4	5	5	1	6	3	6
Hernias, Intestinal Obstructions	109	1	5	2	1	..	..	2	2	2	1	3	1
Other Diseases of the Intestines	110	1	..	..	..	..	1	..	1	..	1	1	..
Cirrhosis of the Liver	113	..	..	..	..	..	..	..	1	3	2	7	3
Other Diseases of the Liver	115	1	..	1	..	..	1	..	..	1	1	..	2
Diseases of the Spleen	116	..	..	..	..	..	..	..	..	..	1	..	..
Simple Peritonitis (nonpuerperal)	117	..	..	..	..	..	..	..	..	..	..	1	..
Other Diseases of the Digestive System (cancer and tuberculosis excepted)	118	..	..	..	..	..	..	..	..	1	2	1	..
Acute Nephritis	119	..	1	1	1	1	..	..	1	..	..	1	2
Bright's Disease	120	..	2	9	7	3	4	9	10	18	21	29	25
Other Diseases of the Kidneys and Annexa	122	..	1	..	..	..	..	1	..	..	..	..	1
Calculi of the Urinary Passages	123	..	..	..	..	..	..	..	..	2	..	..	..
Diseases of the Bladder	124	..	..	..	..	..	..	..	..	1	2	..	..
Diseases of the Prostate	126	..	..	..	..	..	..	..	..	..	..	..	..
Nonvenereal Diseases of the Male Genital Organs	127	..	1	..	..	..	..	..	..	..	..	..	..
Uterine Tumor (noncancerous)	129	..	..	..	..	..	..	..	..	1	2	2	..
Other Diseases of the Uterus	130	..	..	..	..	..	..	..	..	1	1	2	1
Cysts and Other Tumors of the Ovary	131	..	..	..	..	..	..	..	..	..	2	..	..
Salpingitis and Other Diseases of the Female Genital Organs	132	..	..	..	..	..	..	..	1	1	2	2	2
Accidents of Pregnancy	134	..	..	..	..	..	1	1	3	1	2	..	..
Puerperal Hæmorrhage	135	..	..	..	..	..	1	3	4	3	2	..	1

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IN THE STATISTICAL DIVISION OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	...	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
...	...	...	...	...	...	...	...	1	.....	...	..	..	..	..	..	..	..	1	..	..	..	1	...	...	...
1	...	...	...	...	...	...	2	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	1	1	1	...
...	...	...	1	...	...	...	4	2	.....	4	..	..	..	1	1	..	..	..	..	..	..	2	3	1	...
19	26	55	43	19	1	..	131	147	8	131	15	1	45	32	11	3	13	1	18	..	7	1	116	75	85	2
23	31	50	44	9	2	..	129	116	16	127	11	2	44	28	11	3	8	2	4	..	5	..	115	44	86	...
3	1	2	3	1	...	...	7	9	.....	11	..	..	2	1	1	..	..	..	..	..	1	..	10	1	5	...
4	5	10	21	9	1	..	35	23	1	32	1	..	11	3	2	..	2	..	2	..	..	..	25	11	19	...
...	...	...	2	...	...	...	1	2	.....	2	..	..	..	1	..	..	..	..	..	..	..	..	1	1	1	...
...	...	1	1	...	...	...	1	1	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	1	....	1	...
...	...	...	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	...	...
...	...	1	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	...	...	...	...	...	...	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
...	1	...	...	...	...	...	3	1	.....	3	1	..	..	..	..	..	..	..	..	..	..	..	1	3	...	...
...	1	...	...	...	...	...	...	2	1	2	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...
...	1	5	11	6	1	..	32	39	6	57	2	..	4	3	2	1	..	1	..	..	..	1	5	50	16	...
...	5	6	7	2	...	...	13	10	1	8	..	..	5	7	..	..	..	..	2	..	1	..	11	4	8	...
5	3	10	10	4	...	...	120	105	14	192	2	..	11	6	11	..	1	..	2	..	..	..	20	188	17	...
24	22	49	46	16	1	..	194	164	23	225	9	3	30	40	24	1	12	1	8	1	4	..	118	148	92	...
3	8	6	3	...	...	...	20	23	3	27	2	..	4	4	2	..	1	..	1	..	2	..	17	18	8	...
9	5	9	13	6	2	..	28	36	4	34	3	..	5	11	4	..	3	..	2	..	2	..	21	17	26	...
1	...	...	...	...	...	...	3	...	1	2	..	..	..	..	..	..	1	..	..	..	..	..	3	....	...	...
1	1	8	5	2	...	...	7	11	2	8	..	..	5	2	1	..	..	1	1	..	..	..	8	2	8	...
...	...	1	...	...	...	...	1	...	.....	...	1	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
...	...	...	...	...	...	...	...	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
...	...	...	...	...	1	...	1	2	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	....	2	1	...
...	...	1	...	...	...	...	2	3	.....	5	..	..	..	..	..	..	..	..	..	..	..	..	....	4	1	...
1	1	3	...	1	...	...	4	3	.....	3	1	..	..	1	1	..	1	..	..	..	..	..	6	3	3	...
3	2	5	3	1	1	..	45	38	12	75	..	..	1	2	..	..	1	..	1	..	2	1	12	63	8	...
...	...	...	...	...	...	...	243	162	25	401	..	..	..	..	4	..	..	..	..	..	..	..	....	405	...	...
5	5	10	12	5	...	...	24	39	3	31	2	..	4	12	6	3	2	..	..	..	2	1	21	22	20	...
2	2	3	...	...	...	...	33	14	1	33	1	..	2	1	3	..	..	..	4	1	2	..	21	22	4	...
4	...	5	3	2	...	...	16	18	3	20	4	..	3	2	4	..	..	..	..	..	1	..	12	13	9	...
1	1	1	...	...	...	...	3	5	.....	5	..	..	1	..	1	..	1	..	..	..	..	..	1	4	3	...
8	10	18	6	2	...	...	47	13	.....	31	4	..	9	6	3	..	3	..	1	..	2	1	44	4	12	...
2	2	2	...	...	...	...	3	10	.....	10	..	..	1	..	..	..	1	..	1	..	..	..	8	4	1	...
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
...	1	...	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	...	...
1	...	...	...	...	...	...	2	3	2	4	..	..	..	..	1	..	..	..	..	..	..	..	5	....	...	...
1	...	2	...	...	...	...	3	3	.....	5	..	..	1	3	..	..	1	..	1	..	..	..	5	4	2	...
31	50	86	62	17	...	...	214	179	13	190	18	2	66	62	14	4	6	2	15	1	9	4	182	85	123	3
...	1	1	...	...	...	...	3	2	.....	4	..	..	..	..	..	..	1	..	..	..	..	..	1	2	2	...
...	3	5	1	...	...	...	1	10	.....	5	..	..	2	2	1	..	1	..	..	..	..	..	6	1	4	...
...	2	...	4	2	...	...	6	5	.....	7	2	..	..	..	..	1	..	..	..	..	..	1	7	1	3	...
...	...	1	...	...	...	...	1	...	.....	...	..	..	..	1	..	..	..	..	..	..	..	..	....	...	1	...
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	1	1	...	...	...	...	7	1	5	..	..	1	..	..	..	..	..	1	..	..	..	5	....	2	...
...	1	1	...	...	...	...	...	7	2	6	1	..	..	..	..	..	..	..	..	..	..	..	5	1	1	...
...	...	...	...	...	...	...	...	2	.....	...	..	..	..	..	1	..	1	..	..	..	..	..	2	....	...	...
...	...	...	...	...	...	...	...	8	.....	4	..	..	1	..	..	..	1	..	2	..	..	..	5	1	2	...
...	...	...	...	...	...	...	...	8	.....	6	..	1	..	1	1	..	..	..	..	..	..	..	3	....	...	...
...	...	...	...	...	...	...	...	14	2	5	1	..	1	1	2	..	1	..	2	..	1	..	13	1	...	...

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TABLE 33.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN NEWARK.		AGE PERIODS.											
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-five to thirty	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Other Accidents of Labor	136	..	..	..	..	..	1	..	3	1	1	2	..
Puerperal Septichæmia	137	..	..	..	..	..	5	7	5	2	2	..	1
Puerperal Albuminuria and Convulsions	138	..	..	..	..	..	1	4	7	2	1	..	1
Puerperal Phlegmasia Alba Dolens, Embolus, Sudden Death	139	..	..	..	..	..	..	1	..	..	..	1	..
Gangrene	142	..	..	..	..	..	..	..	..	..	..	..	..
Acute Abscess	144	1	3	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Skin and Annexa	145	2	1	..	..	..	..	..	..	..	..	..	1
Diseases of the Bones (tuberculosis excepted)	146	..	..	1	..	..	1	..	1	..	1	1	..
Diseases of the Bones (tuberculosis and rheumatism excepted)	147	..	..	..	..	..	..	..	1	..	..	..	..
Congenital Malformations (stillbirths not included)	150	4	5	..	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	207	10	..	..	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	59	11	1	..	..	..	..	..	..	..	..	..
Lack of Care	153	1	1	..	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Poison	155	..	..	..	..	..	1	2	3	4	..	4	..
Suicide by Asphyxia	156	..	..	..	..	..	..	1	1	2	4	2	2
Suicide by Hanging or Strangulation	157	..	..	..	..	1	1	..	1	2	1	2	1
Suicide by Drowning	158	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Firearms	159	..	..	..	..	..	..	4	..	1	1	..	4
Suicide by Cutting or Piercing Instruments	160	..	..	..	..	..	..	..	..	..	1	..	..
Poisoning by Food	164	..	..	..	..	..	..	..	..	..	1	..	1
Other Acute Poisonings	165	..	..	1	1	..	1	..	..	1	..	..	..
Conflagration	166	..	..	..	..	..	1	1	..	..	..	..	..
Burns (conflagration excepted)	167	..	2	19	4	1	..	1	1	..	1	1	..
Absorption of Deleterious Gases (conflagration excepted)	168	..	..	..	..	1	..	2	1	1	1	1	2
Accidental Drowning	169	..	..	2	2	3	4	3	..	6	2	2	2
Traumatism by Firearms	170	..	..	..	..	..	1	1	..	..	..	1	..
Traumatism by Fall	172	..	2	7	1	..	1	..	1	3	5	5	1
Traumatism by Machines	174	..	..	..	..	..	..	..	..	..	..	1	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	..	..	3	4	2	4	10	7	8	2	7	2
Injuries by Animals	176	..	..	..	..	..	..	..	1	..	..	..	..
Excessive Cold	178	..	..	..	..	..	..	..	..	..	..	..	..
Effects of Heat	179	3	8	2	2	1	1	..	2	7	2	5	5
Lightning	180	..	..	..	..	..	..	..	..	..	..	..	..
Electricity (lightning excepted)	181	..	..	..	..	..	..	..	..	1	..	..	..
Homicide by Firearms	182	..	..	..	..	..	..	1	..	2	2	..	..
Homicide by Cutting or Piercing Instruments	183	..	..	..	..	..	..	..	1	..	..	..	..
Homicide by Other Means	184	..	..	..	..	..	..	1	..	1	1	2	..
Cause of Death Not Specified or Ill-defined	189	3	30	12	1	..	..	1	..	..	..	..	..

Total deaths, 5,451. Death-rate, 15.13.

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IN THE STATISTICAL DIVISION OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	...	8	.....	5	1	..	..	..	2	..	..	..	..	..	..	..	8	..	..	...
...	1	...	...	...	...	...	...	23	1	13	1	1	2	..	3	..	1	..	1	..	1	..	19	3	1	...
...	...	...	...	...	...	...	...	16	3	10	..	..	1	..	2	..	1	..	1	..	1	..	12	2	1	...
...	...	...	...	...	...	...	...	2	.....	1	..	..	..	..	..	..	1	..	..	..	..	..	2	..	..	...
...	1	1	...	2	..	..	2	2	.....	..	2	..	2	..	..	..	..	..	..	..	..	..	1	..	3	...
...	1	1	...	..	..	..	3	3	.....	5	..	..	1	..	..	..	..	..	..	..	..	..	4	2	..	...
1	2	2	2	..	..	..	6	5	.....	4	..	..	4	2	..	..	..	..	..	..	1	..	5	4	2	...
...	...	1	...	1	..	..	4	3	.....	2	..	..	1	2	1	..	..	..	..	..	1	..	2	4	1	...
...	...	...	...	...	...	...	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	...
...	...	...	...	...	...	...	4	5	.....	9	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..	...
...	...	...	...	...	...	...	119	98	12	217	..	..	..	..	..	..	..	..	..	..	..	..	..	217	..	...
...	...	...	...	...	...	...	38	33	5	71	..	..	..	..	..	..	..	..	..	..	..	..	..	71	..	...
...	...	...	...	...	...	...	..	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	...
...	..	3	17	20	4	..	14	30	.....	17	..	..	18	9	..	1	..	..	2	..	1	1	10	1	22	...
2	2	3	..	1	..	..	15	7	.....	12	..	1	5	2	..	1	..	..	..	..	1	..	15	4	3	...
2	2	4	..	..	..	..	14	7	.....	12	1	..	1	..	..	..	2	..	4	..	1	..	14	2	6	...
2	1	3	1	..	..	..	14	2	.....	6	..	..	4	1	..	1	1	..	1	..	..	2	8	4	2	1
1	..	..	1	..	..	..	2	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	
1	..	..	1	..	..	..	11	1	.....	4	3	..	1	..	1	..	..	..	1	..	1	1	9	2	..	1
...	...	...	...	...	...	...	1	..	.....	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	...
...	...	...	...	...	...	...	2	..	.....	..	..	..	1	..	1	..	..	..	..	..	..	..	2	..	..	...
...	...	1	...	...	...	...	1	1	1	1	..	..	..	1	..	..	..	..	..	..	..	..	2	1	..	...
...	...	..	...	...	...	...	1	1	.....	1	..	..	1	..	..	..	..	..	..	..	..	..	..	2	..	...
...	...	2	1	...	...	...	14	19	3	28	..	1	..	..	1	..	..	1	1	..	1	..	6	27	..	...
...	1	4	2	...	...	...	8	9	1	6	1	..	6	3	..	..	1	..	..	..	..	..	5	5	7	...
1	...	...	...	...	...	...	28	1	11	18	1	..	..	2	1	1	..	1	1	..	2	2	9	17	1	2
...	...	...	...	...	...	...	2	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	...
4	3	4	4	7	2	..	35	15	3	29	2	..	5	4	3	1	2	..	1	..	..	3	16	20	10	4
...	...	1	...	...	...	...	2	...	1	1	..	..	..	..	1	..	..	..	..	..	..	..	2	..	..	...
5	4	3	2	1	...	...	78	4	.....	34	1	..	2	7	12	4	6	2	4	..	3	7	38	34	5	5
...	...	...	...	...	...	...	1	...	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	...
...	1	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	...
3	5	5	10	6	1	..	45	21	2	37	1	..	9	7	3	..	4	..	..	..	3	2	15	29	21	1
...	1	...	...	...	...	...	1	...	.....	...	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	...
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
...	...	...	...	...	...	...	3	2	.....	1	..	..	..	..	2	..	..	..	..	..	1	1	3	1	..	1
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	...
...	...	...	...	...	...	...	6	...	.....	3	..	..	..	1	1	..	..	..	1	..	..	..	4	2	..	...
...	...	...	...	...	...	...	29	18	3	45	..	..	..	..	..	..	..	..	2	..	..	..	..	47	..	...

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TABLE 34.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN NEW BRUNSWICK.		AGE PERIODS.											
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Typhoid Fever	1						1	1			
Scarlet Fever	7			1	1	1					
Whooping Cough	8		4	6							
Diphtheria and Croup	9			2							
Dysentery	14										
Tetanus	24						1				
Tuberculosis of the Lungs	28						1	7	6	6	5
Acute Miliary Tuberculosis	29							1			
Tuberculous Meningitis	30									1	
Abdominal Tuberculosis	31			1							
Disseminated Tuberculosis	35								2		
Cancer and Other Malignant Tumors of the Buccal Cavity	39										
Cancer and Other Malignant Tumors of the Stomach, Liver	40									1	
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum.	41									1	
Cancer and Other Malignant Tumors of the Female Genital Organs.	42										
Cancer and Other Malignant Tumors of the Breast	43										1
Cancer and Other Malignant Tumors of the Skin	44										1
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified.	45										
Acute Articular Rheumatism	47										
Diabetes	50										
Anæmia, Chlorosis	54										
Other General Diseases	55	1									
Alcoholism (acute or chronic)	56								1		1
Other Chronic Poisonings	59										
Simple Meningitis	61	1	3	2			1				
Including Cerebrospinal Fever	61A				1						
Cerebral Hæmorrhage, Apoplexy	64		1				1				
Paralysis Without Specific Cause	66										1
Other Forms of Mental Alienation	68										
Convulsions of Infants	71	2	1	2							
Chorea	73										
Pericarditis	77										
Acute Endocarditis	78				1	1	1				
Organic Diseases of the Heart	79			1	1	1					
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81										
Acute Bronchitis	89			1							
Chronic Bronchitis	90										
Bronchopneumonia	91		7	2	1						
Pneumonia	92	3	7	1			1		1	1	
Pleurisy	93										
Pulmonary Congestion, Pulmonary Apoplexy	94			1			1				
Gangrene of the Lung	95										
Asthma	96										
Other Diseases of the Stomach (cancer excepted)	103	1	3								1
Diarrhœa and Enteritis (under 2 years)	104	5	56	10							
Diarrhœa and Enteritis (2 years and over)	105			1				1			1
Appendicitis and Typhlitis	108				1	1		1	1		1
Hernias, Intestinal Obstructions	109										1
Other Diseases of the Intestines	110								1		
Cirrhosis of the Liver	113									1	
Acute Nephritis	119										
Bright's Disease	120							2	1		2
Calculi of the Urinary Passages	123										

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	1	..	..	2	..	..	..	..	2	3	1	5	..	..	..	..	..	..	..	..	..	..	..	..	4	..	1	..
..	..	..	..	..	..	..	..	..	2	1	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
..	..	..	..	..	..	..	..	..	5	5	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..
..	..	..	..	..	..	..	..	..	2	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..
5	2	1	2	1	1	..	..	..	28	9	1	23	..	..	2	2	1	..	8	..	1	..	..	..	23	12	2	..
..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	..	..	..	..	..	..	2	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	..
..	..	..	1	4	..	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	3	3	..	2	2	..	1	1	..	..	..	..	..	..	..	..	5	1	..	..
1	1	..	..	..	..	..	..	..	..	3	..	2	..	..	..	..	..	..	..	..	1	..	..	..	1	2	..	..
..	2	1	..	..	..	..	..	..	..	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..
..	1	..	..	1	1	..	..	..	..	4	..	2	..	..	1	1	..	..	..	..	..	..	..	..	..	2	2	..
..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..
..	..	..	..	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	2	..	..	1	..	..	..	..	3	..	1	..	..	2	..	..	..	..	..	..	..	..	..	1	..	2	..
..	..	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	1	1	..	..	..	..	..	..	2	2	1	3	..	..	..	..	..	1	..	..	..	..	..	..	4	..	..	..
..	..	..	..	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..
..	1	2	..	2	..	..	..	..	10	2	2	10	..	..	..	1	..	..	..	..	..	..	..	1	5	7	..	..
..	..	1	..	..	..	..	..	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..
..	1	3	1	10	9	5	..	..	19	12	..	19	2	1	3	5	1	..	..	..	..	..	..	..	13	4	14	..
..	..	..	2	2	1	1	..	..	4	3	1	6	..	..	..	1	..	..	..	..	..	..	..	..	2	1	4	..
..	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	1	..	..	..	3	2	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..
..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	1	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	1	1	2	..	..	..	3	4	..	6	..	..	..	1	..	..	..	..	..	..	..	..	2	3	2	..
1	1	4	6	16	5	2	..	..	20	18	2	22	..	..	3	5	..	..	5	..	..	..	1	2	19	7	12	..
..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	1	2	..	1	1	..	8	7	2	12	..	..	..	..	..	..	..	..	2	..	..	1	..	11	4	..
1	1	4	..	4	4	4	..	..	22	10	..	20	2	..	4	1	..	..	2	1	..	..	1	1	10	16	5	1
..	..	..	..	..	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	1	1	1	..	..	..	1	4	..	3	..	..	..	1	..	..	..	1	..	..	..	..	2	2	1	..
..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	1	1	1	..	..	..	2	1	1	2	..	..	..	1	..	..	..	..	..	..	..	..	1	..	2	..
..	..	..	..	1	..	..	..	..	3	3	..	5	1	..	..	..	..	..	..	..	..	..	..	..	3	3	..	..
..	..	..	..	..	..	..	..	..	45	26	3	71	..	..	..	..	..	..	..	..	..	..	..	..	..	71	..	..
..	..	1	..	1	..	..	..	..	4	1	..	4	..	..	..	1	..	..	..	..	..	..	..	..	1	2	2	..
1	1	..	..	..	..	..	..	..	4	3	..	5	..	..	1	..	..	..	1	..	..	..	..	..	4	3	..	..
..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	1	..	..	..	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
..	..	..	1	1	..	..	..	..	2	1	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	..
..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..
4	3	2	2	9	1	2	..	..	15	13	4	19	..	..	4	3	..	..	..	..	..	..	1	1	16	5	6	1
..	..	2	..	..	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	..	1	..	..	..	2	..	..	..

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TABLE 34.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN NEW BRUNSWICK.		AGE PERIODS.										
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Diseases of the Bladder	124	..	..	..	..	..	..	1	..	..	..
Diseases of the Prostate	126	..	..	..	..	..	..	..	..	..	..
Uterine Tumor (noncancerous)	129	..	..	..	..	..	..	..	..	..	..
Cysts and Other Tumors of the Ovary	131	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Skin and Annexa	145	..	..	1	..	..	..	..	..	..	..
Congenital Malformation (stillbirths not included)	150	1	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	28	..	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	2	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..
Suicide by Poison	155	..	..	..	..	..	1	..	..	1	..
Suicide by Firearms	159	..	..	..	..	1	1	..	..	..	..
Burns (conflagrations excepted)	167	..	..	3	1	..	1	..	..	..	..
Accidental Drowning	169	..	..	1	1	..	1	1	1	..	..
Traumatism by Firearms	170	..	..	..	..	1	..	..	..	..	..
Traumatism by Fall	172	..	..	..	..	..	..	..	1	..	..
Traumatism by Other Crushing (vehicles, railroads, landslides, etc.)	175	..	..	..	1	..	..	2	1	1	1
Effects of Heat	179	..	1	..	..	..	..	..	..	..	..
Electricity (lightning excepted)	181	..	..	..	..	..	..	..	..	1	..
Homicide by Other Means	184	..	..	..	..	..	..	..	..	..	..
Cause of Death not Specified or Ill-defined	189	1	4	..	..	..	..	..	..	..	..

Total deaths, 474. Death-rate, 20.22.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.									SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	1	..	..	..	..	..	..	..	2	..	.....	....	1	..	..	..	..	..	1	..	..	..	..	..	..	1	1	..	..
..	..	..	..	1	..	..	..	..	1	..	.....	....	..	1	..	..	..	..	..	..	..	..	..	..	..	....	....	1	..
..	1	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	..	..
1	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	..
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	..
..	..	..	..	..	..	..	..	..	14	14	1	28	..	..	..	..	..	..	..	..	..	..	..	..	..	....	28	..	..
..	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	....	2	..	..
..	..	..	..	1	1	6	4	..	4	8	.....	4	..	..	2	6	..	..	..	..	..	..	..	..	..	1	12	9	..
..	..	..	..	..	..	..	..	..	1	1	.....	1	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	..	..
..	..	..	..	..	..	..	..	..	2	..	.....	....	..	..	..	..	..	..	1	..	1	..	..	..	..	....	2	..	..
..	..	..	1	..	..	1	..	..	5	3	.....	6	..	..	1	..	..	..	..	..	..	..	..	..	..	2	4	1	..
..	..	..	..	..	..	..	..	..	2	2	.....	4	..	..	..	..	..	..	..	1	..	..	..	..	..	....	3	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	..
..	..	3	..	..	..	1	..	..	3	2	.....	2	..	..	1	1	1	..	..	..	..	..	..	..	..	3	1	1	..
..	..	..	..	..	..	..	..	..	6	..	1	3	..	..	..	..	..	..	..	..	..	..	..	2	1	2	3	..	1
..	..	1	..	1	1	..	..	..	3	1	1	2	..	..	1	..	..	..	..	..	..	..	..	..	..	2	1	1	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	..	..
..	..	1	..	..	..	..	..	..	1	..	.....	....	..	..	..	..	..	..	..	..	..	..	..	..	1	1	....	..	..
1	..	..	..	..	..	..	..	..	4	2	.....	6	..	..	..	..	..	..	..	..	..	..	..	..	..	....	6	..	..

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TABLE 35.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN NORTH PLAINFIELD	AGE PERIODS.											
	Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1	....	....	....	..	1	..	..	..	..	....	..	..
Erysipelas 18	....	....	....	..	..	..	..	..	..	....	1	..
Tuberculosis of the Lungs 28	....	....	....	..	..	..	..	2	1	....	1	1
Cancer and Other Malignant Tumors of the Breast 43	....	....	....	..	..	..	..	..	..	....	..	..
Diabetes 50	....	....	....	..	..	..	..	..	..	....	..	..
Anæmia, Chlorosis 54	....	....	....	..	..	..	..	..	..	....	..	..
Simple Meningitis 61	....	1	1	..	..	..	..	..	..	....	..	..
Including Cerebrospinal Fever 61A	....	....	....	..	..	..	..	..	..	....	1	..
Cerebral Hæmorrhage, Apoplexy 64	....	....	1	..	..	..	..	..	..	....	..	1
Paralysis Without Specified Cause 66	....	....	....	..	..	..	..	..	..	....	..	..
Other Forms of Mental Alienation 68	....	....	....	..	..	..	..	..	..	....	..	..
Convulsions of Infants 71	1	....	1	..	..	..	..	..	..	....	..	..
Acute Endocarditis 78	....	....	1	..	..	..	..	..	..	....	..	..
Organic Diseases of the Heart 79	....	....	....	..	..	..	1	..	..	2	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc. 81	....	....	....	..	..	..	..	..	..	....	..	..
Acute Bronchitis 89	....	....	1	..	..	..	..	..	..	....	..	..
Bronchopneumonia 91	....	....	....	..	..	..	..	..	..	....	..	..
Pneumonia 92	....	1	....	..	..	..	..	..	..	....	1	2
Pulmonary Congestion, Pulmonary Apoplexy 94	....	....	....	..	..	..	..	..	..	....	..	..
Asthma 96	....	....	....	..	..	..	..	..	..	....	..	..
Other Diseases of the Stomach (cancer excepted) 103	....	....	....	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (under 2 years) 104	1	2	....	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (2 years and over) 105	....	....	1	..	..	..	..	..	..	....	..	..
Other Diseases of the Intestines 110	....	....	....	..	..	..	..	..	..	....	..	..
Simple Peritonitis (nonpeurperal) 117	1	....	....	..	..	..	..	..	..	....	..	..
Bright's Disease 120	....	....	....	..	..	..	..	1	..	....	..	1
Congenital Debility, Icterus, and Sclerema 151	2	1	....	..	..	..	..	..	..	....	..	..
Other Diseases Peculiar to Early Infancy 152	....	1	....	..	..	..	..	..	..	....	..	..
Senility 154	....	....	....	..	..	..	..	..	..	....	..	..
Suicide by Hanging or Strangulation 157	....	....	....	..	..	..	..	..	..	....	..	1
Suicide by Cutting or Piercing Instruments 160	....	....	....	..	..	..	..	..	..	....	..	..
Burns (conflagration excepted) 167	....	....	2	..	..	..	..	..	..	....	..	..
Traumatism by Fall 172	....	....	....	..	..	..	..	..	..	....	..	..
Cause of Death Not Specified or Ill-defined 189	1	1	....	..	..	..	..	..	..	....	..	..

Total deaths, 83. Death-rate, 13.35.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
							1			1															1	
								1		1														1			
							1	4	1	5														3	2		
1		1						2		2														1		1	
			1					1					1													1	
		1						1		1																1	
								2		2															2		
							1			1														1			
		1	1	1			1	4		4					1									1	1	2	
		1					1			1														1			
			1					1		1																1	
								2		2															2		
2	1		1				1	4	1	4	1													2	1	2	
	1	1	2				1	6		6				1										4	1	2	
		1			1		1	1			1			1											2		
							1			1															1		
		1	1					1		4				1					1					2	3	1	
		1	1	1			1	2		3														1		2	
1							1			1															1		
	1				2			3		3														1	1	1	
							2	1		2															3		
					1		1	1		2															2		
			1					1		1															1		
								1		1															1		
1		2	5	1			4	7		7			2	2										5	3	3	
								3		3															3		
								1	1	1															1		
				1	1			2		2																2	
								1		1														1			
		1					1			1														1			
								2		2															2		
				1			1	1		2															2	1	

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TABLE 36.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN NUTLEY.	AGE PERIODS.												
	Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-five to thirty	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Whooping Cough 8	..	3	1	..	..	..	..	..	..	..	..	..
Influenza 10	..	..	1	..	..	..	..	..	..	..	..	..
Dysentery 14	..	..	1	..	..	..	..	..	..	..	..	..
Tuberculosis of the Lungs 28	..	..	..	..	..	..	..	1	..	..	..	..
Tuberculous Meningitis 30	..	1	1	..	..	..	1	..	..	1	..	..
Abdominal Tuberculosis 31	..	1	..	..	..	..	..	..	..	..	..	..
Syphilis 37	..	1	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver 40	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Female Genital Organs 42	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Breast 43	..	..	..	..	..	..	..	..	..	..	..	1
Chronic Rheumatism and Gout 48	..	..	..	..	..	..	..	..	..	..	..	1
Simple Meningitis 61	..	..	..	..	..	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy 64	..	..	..	..	..	..	..	..	..	..	..	1
Convulsions of Infants 71	1	1	..	..	..	..	..	..	..	..	..	..
Acute Endocarditis 78	..	..	..	..	..	..	..	..	..	..	..	1
Organic Diseases of the Heart 79	..	..	..	..	1	..	..	..	..	..	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc. 81	..	..	..	..	..	..	..	..	..	..	..	..
Embolism and Thrombosis 82	..	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Larynx 87	..	..	..	1	..	..	..	..	..	..	..	..
Chronic Bronchitis 90	..	..	..	..	..	..	..	..	..	..	..	..
Bronchopneumonia 91	..	1	1	..	..	..	..	..	..	..	..	..
Pneumonia 92	..	..	1	..	..	..	1	..	..	..	1	..
Other Diseases of the Stomach (cancer excepted) 103	..	..	1	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years) 104	..	2	1	..	..	..	..	..	..	..	..	..
Hernias, Intestinal Obstructions 109	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Intestines 110	..	..	..	..	..	..	..	..	..	..	..	..
Cirrhosis of the Liver 113	..	..	..	..	..	..	..	..	..	..	..	..
Bright's Disease 120	..	..	..	..	..	..	..	..	..	..	1	..
Calculi of the Urinary Passages 123	..	..	..	..	..	..	..	..	..	..	1	..
Congenital Debility, Icterus, and Sclerema 151	6	..	..	..	..	..	..	..	..	..	..	..
Senility 154	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Hanging or Strangulation 157	..	..	..	..	..	..	..	1	..	..	..	..
Suicide by Firearms 159	..	..	..	..	..	..	..	..	..	..	..	1

Total deaths, 67. Death-rate, 10.63.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
							2	2		4															4	
							1			1															1	
							1			1															1	
	1		1				2	1	1	1					1							1		2	1	
							4			3					1									1	3	
							1			1															1	
								1		1															1	
1	1						2			1			1											2		
				1				1			1															1
								1		1														1		
							1			1														1		
	2		1				2	1		2	1		1	1			1							1		1
			2				2			2								1						4		
			1	2			1	3		2			1				1							1		3
			1				2			2															1	1
		1	3				2	1		2												1		2		1
1							1			1														1		
								1		1															1	
			1				1			1																1
							1	1		2															2	
1								4		3					1									2	1	1
								1		1															1	
							1	2		3															3	
		1					1			1														1		
				1				1		1															1	
1							1			1														1		
		1	1				3			1			1		1									1	1	1
								1							1									1		
							4	2		6															6	
		1					1							1										1		
		1					1						1												1	
							2			2														1	1	

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TABLE 37.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ORANGE.		AGE PERIODS.										
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	
Typhoid Fever	1	..	..	..	..	1	..	1	..	..	..	1
Malaria	4	..	..	..	..	..	..	..	..	..	..	..
Measles	6	..	..	1	..	..	..	..	..	..	..	..
Scarlet Fever	7	..	..	..	..	1	..	..	..	..	..	..
Whooping Cough	8	..	2	2	..	..	..	..	..	..	..	..
Diphtheria and Croup	9	..	..	3	1	..	..	..	1	..	..	..
Including Croup	9A	..	1	2	..	..	..	..	..	..	..	..
Dysentery	14	..	..	..	..	1	..	..	..	..	..	..
Erysipelas	18	..	..	..	..	..	..	..	..	..	..	..
Tuberculosis of the Lungs	28	..	..	..	..	1	5	8	8	6	6	6
Tuberculous Meningitis	30	..	2	3	4	1	1	..	1	..	..	..
Abdominal Tuberculosis	31	..	2	..	..	..	..	..	..	2	..	..
Pott's Disease	32	..	..	..	1	..	..	..	..	..	..	..
Tuberculosis of Other Organs	34	..	..	..	..	..	1	1	..	..	..	..
Cancer and Other Malignant Tumors of the Buccal Cavity	39	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	..	..	1	..	..
Cancer and Other Malignant Tumors of the Peritoneum, Intestines, Rectum.	41	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Female Genital Organs.	42	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Breast	43	..	..	..	..	..	..	..	2	..	1	..
Cancer and Other Malignant Tumors of the Skin	44	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified.	45	..	..	..	..	..	..	..	..	..	..	..
Chronic Rheumatism and Gout	48	..	..	..	..	..	..	..	..	..	..	..
Scurvy	49	..	1	..	..	..	..	..	..	..	..	..
Diabetes	50	..	..	..	..	..	..	..	..	..	..	1
Leuchæmia	53	..	..	..	..	..	..	..	..	..	..	..
Anæmia, Chlorosis	54	..	..	..	..	..	..	..	..	..	..	..
Other General Diseases	55	1	..	..	..	..	..	..	..	..	..	..
Alcoholism (acute or chronic)	56	..	..	..	..	..	..	..	1	..	..	..
Simple Meningitis	61	..	..	1	..	1	1	..	..	..	..	..
Including Cerebrospinal Fever	61A	..	..	..	..	..	..	..	1	..	..	..
Other Diseases of the Spinal Cord	63	..	..	..	1	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	1	4	..	..	1	..	1	..	..	..	1
Epilepsy	69	..	..	..	..	..	..	..	..	..	..	1
Convulsions of Infants	71	1	3	..	..	..	..	..	..	..	..	..
Diseases of the Ears	76	..	..	..	..	..	..	..	..	..	..	..
Acute Endocarditis	78	..	..	..	..	2	..	1	..	..	..	..
Organic Diseases of the Heart	79	1	..	..	..	1	..	1	2	..	1	..
Angina Pectoris	80	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	1	..	..	..	..	..	1	..	..
Diseases of the Lymphatic System (lymphangitis, etc.)	84	..	..	..	..	..	..	..	..	..	1	..
Acute Bronchitis	89	..	..	2	..	..	..	..	..	..	..	..
Bronchopneumonia	91	..	5	11	1	..	..	..	..	..	..	..
Pneumonia	92	..	6	10	..	1	2	3	1	..	3	..
Pleurisy	93	..	..	1	..	..	..	..	..	..	..	..
Pulmonary Congestion, Pulmonary Apoplexy	94	1	..	1	..	..	..	..	..	..	..	..
Asthma	96	..	..	..	..	..	..	..	..	..	..	..
Ulcer of the Stomach	102	..	..	..	..	..	..	3	..	..	..	..
Other Diseases of the Stomach (cancer excepted)	103	1	8	..	..	1	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	5	28	4	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	..	..	..	..	..	..	..	..	..	..	..
Appendicitis and Typhlitis	108	..	..	..	1	..	2	..	1	1	..	..
Hernias, Intestinal Obstructions	109	..	..	..	1	..	..	..	..	..	..	..
Other Diseases of the Intestines	110	1	..	..	..	..	..	..	..	..	..	..

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	1	..	..	..	..	..	..	..	3	1	.....	3	..	..	..	..	1	..	..	..	..	..	..	..	..	3	1	..	..
1	..	..	..	..	..	..	..	..	1	..	.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	1	3	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..
..	..	..	..	..	..	..	..	..	3	2	.....	5	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	..	..
..	..	..	..	..	..	..	..	..	2	1	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
..	..	..	..	1	..	1	..	..	2	1	1	1	1	..	..	1	..	..	..	..	..	..	..	..	..	2	1	..	..
..	..	..	..	1	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
9	2	2	1	2	..	..	..	..	25	25	10	35	4	..	3	2	2	1	1	1	..	..	..	1	22	21	7	..
..	..	..	1	..	..	..	..	..	8	5	4	11	..	..	..	1	1	..	..	..	..	..	..	..	1	11	1	..
..	..	..	..	1	..	..	..	..	4	1	.....	4	..	..	..	1	..	..	..	..	..	..	..	..	..	4	1	..
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	1	1	.....	1	..	..	..	..	1	..	..	..	..	..	..	..	..	1	1	..	..
..	..	1	..	1	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
..	3	2	1	4	2	..	..	..	5	8	1	7	2	..	2	1	1	..	..	..	..	..	..	..	..	9	..	4	..
..	..	1	..	..	..	1	..	..	..	2	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..
2	..	1	..	2	..	..	..	..	..	5	.....	3	..	..	..	1	1	..	..	..	..	..	..	..	..	4	..	1	..
..	..	..	..	1	..	..	..	..	..	4	.....	3	..	..	..	1	..	..	..	..	..	..	..	..	..	2	1	1	..
..	..	..	1	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	2	..	..	..	..	1	1	.....	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	1	1	..
..	..	..	..	..	1	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	1	1	..	1	..	..	..	..	2	2	.....	2	1	..	..	1	..	..	..	..	..	..	..	..	..	3	1	..	..
1	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	1	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	2	..	1	1	..	..	..	..	4	1	1	5	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	2	..
..	..	..	..	..	..	..	..	..	1	2	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
1	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
..	1	3	1	3	6	4	..	..	14	12	2	16	2	..	2	4	1	..	1	..	..	..	..	..	..	8	7	11	..
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	2	2	2	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..
..	..	1	..	..	..	..	..	..	..	1	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..
2	2	2	3	6	6	..	..	..	15	9	5	13	..	..	2	7	1	..	..	..	..	..	..	1	..	7	7	10	..
1	2	1	8	6	6	2	..	..	18	14	1	13	..	1	2	9	4	1	..	..	1	..	1	..	..	17	6	9	..
..	..	..	..	2	..	..	..	..	2	..	.....	..	..	..	1	1	..	..	..	..	..	..	..	..	..	1	..	1	..
..	..	..	..	..	1	1	..	..	3	1	.....	2	..	..	..	1	..	..	..	..	..	..	..	1	..	1	2	1	..
..	..	..	..	..	..	..	..	..	..	1	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	2	1	..	..	..	2	3	.....	3	..	..	1	1	..	..	..	..	..	..	..	..	..	..	4	1	..
..	..	1	..	..	2	1	..	..	10	11	1	19	..	..	..	1	1	..	..	..	..	..	..	..	..	4	17	..	..
1	3	3	3	9	5	5	..	..	34	21	5	33	..	..	2	10	7	..	..	1	2	..	..	..	..	18	26	11	..
..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
1	..	..	..	4	1	..	1	..	4	5	.....	7	..	..	..	1	1	..	..	..	..	..	..	..	..	4	2	3	..
..	..	1	..	..	1	1	..	..	3	..	.....	..	1	..	..	..	2	..	..	..	..	..	..	..	..	1	..	2	..
..	..	..	..	..	..	..	..	..	1	2	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..
..	..	1	..	..	..	..	..	..	9	2	2	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	..	..
..	..	..	..	..	..	..	..	..	24	13	5	37	..	..	..	..	..	..	..	..	..	..	..	..	..	..	37	..	..
1	..	..	..	..	2	1	..	..	1	3	.....	2	..	..	..	..	1	..	..	..	..	..	..	..	..	2	..	2	..
1	1	..	..	..	..	..	..	..	2	5	1	6	..	..	..	1	..	..	..	..	..	..	..	..	..	2	5	..	..
1	..	..	..	1	2	..	..	..	2	3	1	5	..	..	1	1	..	..	..	..	..	..	..	..	..	3	1	1	..
..	..	..	..	1	..	..	..	..	..	2	.....	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	..

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TABLE 37.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ORANGE		AGE PERIODS.									
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Cirrhosis of the Liver	113	..	..	..	..	..	..	..	..	1	..
Simple peritonitis (nonpuerperal)	117	1	..	..	1	..	..	..	..	..	..
Acute Nephritis	119	..	..	1	..	..	..	..	..	..	1
Bright's Disease	120	..	..	1	..	2	..	1	1	..	1
Calculi of the Urinary Passages	123	..	..	..	1	..	..	..	..	..	..
Diseases of the Bladder	124	..	..	..	..	..	..	..	..	..	1
Diseases of the Prostate	126	..	..	..	..	..	..	..	..	..	..
Uterine Tumor (noncancerous)	129	..	..	..	..	..	..	..	..	1	..
Cysts and Other Tumors of the Ovary	131	..	..	..	..	..	..	..	..	..	..
Salpingitis and Other Diseases of the Female Genital Organs.	132	..	..	..	..	..	..	..	2	..	..
Accidents of Pregnancy	134	..	..	..	..	..	..	..	..	2	..
Puerperal Hæmorrhage	135	..	..	..	..	..	..	1	..	1	..
Other Accidents of Labor	136	..	..	..	..	..	..	..	1	..	..
Puerperal Septichæmia	137	..	..	..	..	..	..	..	1	1	1
Puerperal Albuminuria and Convulsions	138	..	..	..	..	..	..	..	1	..	..
Diseases of the Bones (tuberculosis excepted)	146	..	..	..	..	..	..	..	..	..	..
Congenital Malformations (stillbirths not included)	150	1	..	1	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	24	1	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	4	1	..	..	..	..	..	..	..	..
Lack of Care	153	2	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..
Suicide by Poison	155	..	..	..	..	..	..	..	..	..	..
Suicide by Firearms	159	..	..	..	..	..	..	..	..	..	..
Suicide by Cutting or Piercing Instruments	160	..	..	..	..	..	..	..	..	..	1
Other Acute Poisonings	165	..	..	..	..	..	..	..	..	1	..
Burns (conflagration excepted)	167	..	..	..	2	..	..	..	..	..	..
Absorption of Deleterious Gases (conflagration excepted)	168	..	..	..	..	..	..	..	..	..	..
Traumatism by Fall	172	..	..	..	1	..	..	..	1	..	..
Traumatism by Other Crushing (vehicles, railroad landslides, etc.)	175	..	..	2	..	1	..	..	..	2	1
Injuries by Animals	176	..	..	1	..	..	..	..	..	..	..
Effects of Heat	179	..	1	..	..	..	..	..	..	..	1
Cause of Death not Specified or Ill-Defined	189	..	8	1	..	..	..	..	..	..	..

Total deaths, 540. Death-rate, 17.80.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.								SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
1	2	2	1	1	1	...	..	..	3	6	1	5	..	..	1	3	..	..	..	..	..	..	..	..	8	....	1	...
..	..	...	1	...	...	...	..	..	2	1	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	1	2	...	...
..	..	...	...	...	...	...	..	..	...	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
2	5	4	2	6	5	1	..	..	16	15	3	20	3	1	1	4	1	..	..	..	1	..	..	..	17	10	4	...
..	..	...	...	1	...	...	..	..	2	...	.....	1	..	..	1	..	..	..	..	..	..	..	..	..	1	1	...	...
..	..	...	...	1	1	...	..	..	2	1	.....	2	..	..	..	1	..	..	..	..	..	..	..	..	1	1	1	...
..	..	...	1	...	1	...	..	..	2	...	.....	1	..	..	..	..	1	..	..	..	..	..	..	..	1	....	1	...
..	1	...	...	...	...	...	..	..	...	2	.....	1	..	..	..	..	1	..	..	..	..	..	..	..	1	1	...	...
..	..	...	...	...	1	...	..	..	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	...	...	1	...
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..	..	...	...	...	...	...	..	..	...	3	.....	1	..	..	..	..	1	..	1	..	..	..	..	..	3	....	...	...
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1	..	...	...	...	...	...	..	..	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	...	...	...	...	...	..	..	2	...	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	...	...
..	..	...	...	...	...	...	..	..	13	12	4	25	..	..	..	..	..	..	..	..	..	..	..	..	....	25	...	...
..	..	...	...	...	...	...	..	..	3	2	1	5	..	..	..	..	..	..	..	..	..	..	..	..	....	5	...	...
..	..	...	...	...	...	...	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	...	...
..	..	...	...	...	...	1	..	..	...	1	.....	...	..	..	..	..	1	..	..	..	..	..	..	..	....	...	1	...
..	..	2	...	...	...	...	..	..	2	...	1	2	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...
..	..	1	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	...
..	..	...	...	...	...	...	..	..	1	...	.....	...	..	..	..	..	..	1	..	..	..	..	..	..	....	1	...	...
..	..	...	...	...	...	...	..	..	...	1	.....	...	..	..	..	..	..	1	..	..	..	..	..	..	1	....	...	...
..	..	...	1	1	...	...	..	..	...	4	.....	2	..	..	..	2	..	..	..	..	..	..	..	..	1	2	1	...
..	..	...	...	1	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
..	..	1	1	...	1	3	..	..	5	3	1	1	..	..	2	4	..	1	..	..	..	..	..	..	2	3	3	...
1	..	1	...	1	...	...	..	..	8	1	.....	7	..	..	1	..	..	..	..	..	1	..	..	..	3	5	1	...
..	..	...	...	...	...	...	..	..	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
1	..	1	...	...	...	1	..	..	3	3	.....	2	1	..	1	1	..	..	..	..	..	..	..	..	1	3	1	...
..	..	...	...	...	...	...	..	..	3	1	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	....	4	...	...

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TABLE 38.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PASSAIC CITY.		AGE PERIODS.												
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1	1	..	..	..	..	1	1	..	1	1	..	..
Measles	6	..	4	8	1	..	..	..	..	..	..	..	..
Whooping Cough	8	..	2	3	..	..	..	..	..	..	..	..	..
Diphtheria and Croup	9	..	2	9	3	..	..	..	..	..	..	..	..
Influenza	10	..	..	..	..	..	..	..	..	..	..	..	..
Tetanus	24	..	..	..	..	..	..	1	..	..	..	..	..
Tuberculosis of the Lungs	28	..	2	..	1	1	5	9	11	13	5	4	3
Acute Miliary Tuberculosis	29	..	..	..	..	..	..	..	1	..	..	..	..
Tuberculous Meningitis	30	..	3	3	..	1	..	..	..	..	2	..	..
Abdominal Tuberculosis	31	..	1	2	..	1	..	..	..	..	1	..	..
Pott's Disease	32	..	..	..	..	1	..	..	..	..	..	..	..
Tuberculosis of Other Organs	34	..	1	..	..	..	..	..	..	..	..	..	..
Disseminated Tuberculosis	35	..	..	..	..	..	..	..	..	1	..	..	..
Syphilis	37	2	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Buccal Cavity	39	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	..	..	..	..	1	2
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum	41	..	..	..	..	..	..	..	..	..	..	2	..
Cancer and Other Malignant Tumors of the Female Genital Organs	42	..	..	..	..	..	..	..	..	..	..	..	1
Cancer and Other Malignant Tumors of the Breast	43	..	..	..	..	..	..	..	..	..	..	1	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified	45	..	..	..	..	..	..	..	..	..	..	3	2
Acute Articular Rheumatism	47	..	..	..	..	1	..	..	..	1	..	..	..
Diabetes	50	..	..	..	..	..	..	..	..	..	..	1	1
Addison's Disease	52	..	..	..	..	..	..	..	..	..	..	..	..
Anæmia, Chlorosis	54	..	..	..	..	..	..	..	..	..	..	..	..
Alcoholism (acute or chronic)	56	..	..	..	..	..	..	..	1	1	..	..	2
Simple Meningitis	61	..	3	5	2	1	..	..	1	..	..	1	..
Including Cerebrospinal Fever	61A	..	2	1	..	..	1	..	..	..	..	..	2
Other Diseases of the Spinal Cord	63	..	..	..	..	1	1	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	..	1	..	..	..	..	1	..	1	..	..	1
Softening of the Brain	65	..	..	..	..	..	..	..	..	..	..	..	..
Paralysis Without Specified Cause	66	..	..	1	..	..	..	..	1	..	1	..	..
Other Forms of Mental Alienation	68	..	..	..	..	..	..	..	..	..	..	..	..
Convulsions of Infants	71	6	7	1	..	..	..	..	..	..	..	..	..
Chorea	72	..	3	2	..	..	..	..	..	..	..	..	..
Diseases of the Ears	76	..	..	..	..	..	..	..	..	1	..	..	..
Pericarditis	77	..	..	..	..	..	..	1	..	1	..	1	..
Acute Endocarditis	78	..	..	..	2	..	..	..	1	..	1	..	4
Organic Diseases of the Heart	79	..	..	..	2	1	1	1	..	1	2	3	3
Angina Pectoris	80	..	..	..	..	..	..	..	..	1	..	1	..
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	..	..	..	..	..	..	..	..
Embolism and Thrombosis	82	..	..	..	..	..	..	..	..	1	..	..	..
Acute Bronchitis	89	4	4	..	..	..	..	..	..	..	..	..	..
Chronic Bronchitis	90	..	1	..	..	..	..	..	..	..	..	..	..
Bronchopneumonia	91	8	28	10	2	..	..	..	..	..	..	..	..
Pneumonia	92	9	28	16	1	..	2	4	..	1	4	2	2
Pleurisy	93	..	..	1	..	..	..	..	..	..	..	..	..
Pulmonary Congestion, Pulmonary Apoplexy	94	..	1	2	..	..	..	..	1	..	..	..	..
Asthma	96	..	..	..	..	..	..	..	..	..	..	1	..
Ulcer of the Stomach	102	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Stomach (cancer excepted)	103	2	5	1	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	12	100	15	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	..	..	4	..	..	..	..	..	..	..	..	..
Appendicitis and Typhlitis	108	..	1	..	1	4	..	1	..	..	1	1	..

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	1	1	.....	1	1	...	...	...	1	1	1	...	...	...	...	...	1	4	...	...
...	...	...	...	...	...	...	7	6	.....	13	..	...	...	...	...	...	...	...	...	...	...	...	....	13	...	...
...	...	...	...	...	...	...	2	3	.....	5	..	...	...	...	...	...	...	...	...	...	...	...	....	5	...	...
...	...	...	...	...	...	...	8	6	.....	14	..	...	...	...	...	...	...	...	...	...	...	...	....	14	...	...
...	...	...	...	1	...	...	1	...	.....	1	..	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
1	...	...	...	...	...	...	2	...	.....	1	..	...	...	...	...	...	1	...	...	...	...	...	2	...	...	...
2	3	1	1	...	...	...	27	34	.....	20	1	...	...	2	3	..	21	..	8	8	2	1	35	21	5	...
...	...	...	...	...	...	...	...	1	.....	1	..	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	9	...	.....	5	..	...	...	...	...	...	4	...	...	...	...	...	2	7	...	...
...	...	1	...	...	...	...	4	2	.....	4	..	...	...	...	1	...	1	...	...	...	...	...	2	4	...	...
...	...	...	...	...	...	...	...	1	.....	1	..	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
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...	...	...	...	...	...	...	1	1	.....	2	..	...	...	...	...	...	...	...	...	...	...	...	....	2	...	...
1	...	1	...	...	...	...	1	1	.....	...	..	...	...	...	...	...	1	...	...	1	...	...	2	...	...	...
...	1	2	2	...	...	...	3	5	.....	4	..	...	...	...	1	..	3	...	...	...	...	...	5	....	3	...
1	...	3	...	...	...	...	3	3	.....	4	..	...	...	...	...	...	1	...	...	1	...	...	1	....	5	...
1	...	1	...	...	...	...	...	3	.....	...	..	...	...	1	...	...	1	..	1	...	...	...	1	....	2	...
...	...	...	...	...	...	...	...	1	.....	...	..	...	...	1	...	...	...	...	...	...	...	...	1	....	...	...
...	...	...	...	...	...	...	1	4	1	4	..	...	...	...	...	...	1	...	...	...	...	...	2	....	3	...
...	...	...	1	...	...	...	...	3	1	2	..	...	...	...	...	...	1	...	...	...	...	...	2	1	...	...
...	...	2	1	...	...	...	2	3	.....	3	..	...	...	...	...	...	1	...	...	...	1	...	3	....	2	...
...	...	1	...	...	...	...	...	1	.....	...	..	...	...	...	...	...	...	1	...	...	...	...	....	....	1	...
...	...	1	...	...	...	...	1	...	.....	1	..	...	...	...	...	...	...	...	...	...	...	...	1	....	...	...
...	...	...	...	...	...	...	3	1	.....	1	..	...	...	2	...	...	1	...	...	...	...	...	4	....	...	...
...	...	...	...	...	...	...	9	4	.....	10	1	...	...	...	...	...	...	2	...	...	...	...	2	11	...	...
...	...	...	...	...	...	...	2	4	.....	3	..	...	...	...	...	...	3	...	...	...	...	...	2	4	...	...
...	...	1	...	...	...	...	...	3	.....	3	..	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...
2	1	3	5	1	1	...	10	7	.....	7	1	...	2	...	1	...	...	1	3	1	1	...	3	3	6	...
...	...	...	...	...	...	...	...	...	.....	...	..	...	...	...	...	...	...	...	...	...	...	...	....	....	...	...
...	...	1	...	1	...	...	3	2	.....	2	..	...	2	...	...	...	...	...	1	...	...	...	3	2	...	...
...	...	1	...	...	...	...	1	...	.....	1	..	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	8	6	.....	14	..	...	...	...	...	...	...	...	...	...	...	...	....	14	...	...
...	...	...	...	...	...	...	3	2	.....	5	..	...	...	...	...	...	...	...	...	...	...	...	....	5	...	...
...	...	...	...	...	...	...	1	...	.....	...	..	...	...	...	...	1	...	...	...	...	...	...	....	1	...	...
...	...	2	...	...	...	...	4	1	1	2	..	...	...	...	1	1	1	...	...	...	...	...	4	1	...	...
1	1	8	1	...	...	...	8	11	.....	5	3	...	...	3	..	1	4	...	1	1	1	...	9	5	5	...
3	4	4	5	1	...	...	22	9	2	14	1	...	4	..	1	1	4	...	2	2	2	...	15	11	5	...
...	1	...	2	...	...	...	2	3	.....	2	..	...	1	..	...	...	2	...	...	...	...	...	3	....	2	...
...	...	...	1	...	...	...	...	1	.....	...	..	...	...	1	...	...	...	...	...	...	...	...	....	....	1	...
...	...	...	...	...	...	...	1	...	.....	1	..	...	...	...	...	...	...	...	...	...	...	...	1	....	...	...
...	...	...	1	1	...	...	4	6	.....	9	..	...	...	1	...	...	...	...	...	...	...	...	1	8	1	...
...	...	...	1	...	...	...	1	1	.....	1	..	...	...	...	...	...	...	...	...	...	...	1	....	1	1	...
...	...	1	2	1	...	...	27	25	.....	46	1	...	1	1	...	...	1	...	1	1	...	...	2	48	3	...
1	2	9	6	...	...	...	50	37	3	64	3	...	1	3	4	..	6	..	3	1	2	...	20	57	10	...
...	...	...	...	...	...	...	1	...	.....	1	..	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
...	...	3	4	...	...	...	5	6	.....	8	..	...	...	...	...	...	...	...	2	...	...	1	3	5	3	...
...	...	...	...	...	...	...	1	...	.....	...	..	...	...	...	...	...	1	...	...	...	...	...	1	....	...	...
...	...	1	...	1	...	...	2	...	.....	2	..	...	...	...	...	...	...	...	...	...	...	...	1	....	1	...
...	...	...	...	...	...	...	3	5	.....	8	..	...	...	...	...	...	...	...	...	...	...	...	....	8	...	...
...	...	...	...	...	...	...	74	53	2	126	..	...	...	1	...	...	...	...	...	...	...	...	....	127	...	...
...	...	1	...	...	...	...	3	2	.....	3	..	...	...	2	...	...	...	...	...	...	...	...	....	4	1	...
2	...	...	...	...	...	...	7	4	.....	6	..	...	1	1	...	...	1	2	...	...	...	...	4	7	...	...

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TABLE 38.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PASSAIC CITY.		AGE PERIODS.												
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Hernias, Intestinal Obstructions	109	..	1	..	..	..	..	..	1	1	..	..	2
Other Diseases of the Intestines	110	..	..	1	..	..	..	..	..	..	..	..	..
Cirrhosis of the Liver	113	..	..	..	..	..	..	..	..	..	1	..	1
Other Diseases of the Liver	115	..	..	..	..	..	..	..	..	..	..	..	1
Other Diseases of the Digestive System (cancer and tuberculosis excepted)	118	..	..	..	..	..	..	..	..	..	..	..	..
Bright's Disease	120	1	1	1	1	..	1	..	2	..	1	2	4
Other Diseases of the Kidneys and Annexa	122	..	..	..	..	..	1	..	..	..	..	..	..
Calculi of the Urinary Passages	123	..	..	..	..	..	..	..	..	..	1	..	..
Diseases of the Bladder	124	..	..	..	..	..	..	..	..	..	1	..	..
Other Diseases of the Urethra, Urinary Abscess, etc.	125	..	..	..	..	..	..	..	..	..	1	..	..
Uterine Tumor (noncancerous)	129	..	..	..	..	..	..	..	..	..	..	..	1
Accidents of Pregnancy	134	..	..	..	..	..	..	..	1	..	..	1	..
Puerperal Hæmorrhage	135	..	..	..	..	..	..	..	..	1	1	..	..
Other Accidents of Labor	136	..	..	..	..	..	1	1	..	..	1	..	..
Puerperal Septichæmia	137	..	..	..	..	..	..	2	..	2	2	..	..
Puerperal Albuminuria and Convulsions	138	..	..	..	..	..	1	..	..	..	1	1	..
Gangrene	142	..	1	..	..	..	..	..	..	..	..	..	..
Acute Abscess	144	1	..	..	..	..	..	..	..	..	..	..	..
Diseases of the Bones (tuberculosis excepted)	146	..	1	..	..	..	1	..	..	..	..	..	..
Congenital Malformations (stillbirths not included)	150	2	..	..	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	60	..	..	..	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	3	1	..	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Asphyxia	156	..	..	..	..	..	..	..	..	..	..	..	1
Suicide by Hanging or Strangulation	157	..	..	..	..	..	..	..	..	..	..	1	..
Suicide by Firearms	159	..	..	..	..	..	..	1	..	1	1	..	..
Suicide by Cutting or Piercing Instruments	160	..	..	..	..	..	..	..	..	..	..	..	..
Poisoning by Food	164	..	..	..	..	..	..	..	..	..	..	..	..
Other Acute Poisonings	165	..	..	1	..	..	..	..	..	..	..	..	..
Burns (conflagration excepted)	167	..	..	3	..	..	..	..	..	..	..	..	..
Absorption of Deleterious Gases (conflagration excepted)	168	..	..	..	..	..	..	..	..	..	..	..	..
Accidental Drowning	169	..	..	1	..	..	..	..	1	..	..	..	1
Traumatism by Fall	172	..	1	3	1	..	1	..	1	..	1	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	..	..	..	1	..	2	2	2	1	..	2	..
Starvation	177	..	..	..	..	..	..	..	..	..	..	..	..
Effects of Heat	179	1	1	..	..	..	1	..	1	1	..	1	1
Electricity (lightning excepted	181	..	..	..	..	..	..	..	..	..	..	..	..
Homicide by Firearms	182	..	..	..	..	..	..	..	..	1	..	..	..
Homicide by Other Means	184	1	2	..	..	..	..	..	..	..	..	..	..
Other External Violence	186	..	..	1	..	..	..	..	..	..	..	..	..
Cause of Death Not Specified or Ill-defined	189	6	10	3	..	..	..	..	..	..	..	..	..

Total deaths, 330. Death-rate, 14.27.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	1	1	...	...	...	...	4	3	1	1	...	...	...	1	...	1	2	...	...	1	1	...	4	2	1	...
...	...	...	2	...	...	...	1	2	.....	2	...	...	...	1	...	...	...	...	...	...	...	...	1	1	1	...
...	...	...	...	...	...	...	2	...	.....	...	...	...	...	...	...	...	2	...	...	...	...	...	1	...	1	...
...	...	...	...	...	...	...	...	1	.....	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
1	...	...	...	...	...	...	1	...	.....	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
4	1	4	4	2	...	...	16	14	1	23	...	...	1	2	1	...	2	...	...	1	...	...	14	3	3	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
1	...	...	1	...	...	...	3	...	.....	2	...	...	...	...	...	...	...	...	...	...	1	...	2	...	1	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	2	.....	...	1	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	...	...	...	...	...	2	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
...	...	...	...	...	...	...	...	3	.....	...	...	...	...	...	1	...	1	...	...	1	...	...	3	...	...	...
...	...	...	...	...	...	...	...	8	.....	...	...	...	1	...	1	...	5	...	1	...	...	...	3	...	...	...
...	...	...	...	...	...	...	...	3	.....	1	...	...	...	...	...	...	2	...	...	...	...	...	2	1	...	...
...	...	...	...	...	...	...	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	1	.....	1	...	...	...	...	...	...	1	...	...	...	...	...	...	2	...	...
...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	...	...	...	...	3	1	.....	4	...	...	...	...	...	...	...	...	...	...	...	...	...	60	...	...
...	...	...	2	3	1	...	1	5	.....	2	1	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...
...	...	...	...	...	...	...	33	27	.....	60	...	...	...	2	...	...	...	...	...	...	1	...	...	1	5	...
...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...
...	...	...	...	...	...	...	1	...	.....	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
1	...	1	...	...	...	...	5	...	.....	5	...	...	...	...	...	...	1	...	...	1	...	...	4	1	...	...
...	1	...	...	...	...	...	1	...	.....	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
1	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	3	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
...	...	...	1	...	...	...	...	1	.....	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...
...	...	1	...	...	...	...	4	...	.....	1	...	...	...	1	...	...	2	...	...	...	...	...	...	3	1	...
1	1	1	1	...	...	...	9	3	.....	8	...	...	...	...	...	...	1	1	...	1	1	...	4	7	1	...
...	1	2	...	...	...	...	11	2	.....	6	...	...	...	1	4	1	1	...	...	...	1	...	7	6	...	...
...	...	...	...	1	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
1	1	2	...	...	...	...	6	5	.....	6	...	...	...	1	1	...	...	...	...	...	2	1	4	5	3	...
1	...	...	...	...	...	...	1	...	.....	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	2	.....	1	...	...	...	...	...	...	...	...	...	...	2	...	...	2	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	11	8	.....	18	...	...	...	...	...	...	...	...	...	...	...	1	...	19	...	...

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TABLE 39.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PATERSON.		AGE PERIODS.											
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Typhoid Fever	1	..	..	..	1	1	1	2	..	1	2
Measles	6	..	..	2	..	..	..	..	..	..	..
Scarlet Fever	7	..	..	6	5	1	1	..	..	..	..
Whooping Cough	8	..	9	8	1	..	..	..	..	..	..
Diphtheria and Croup	9	..	..	9	5	1	..	..	..	..	..
Including Croup	9A	..	..	2	2	..	..	..	..	..	..
Influenza	10	..	1	..	..	..	..	..	..	..	..
Dysentery	14	..	1	..	..	..	..	..	..	1	..
Erysipelas	18	..	2	..	..	..	..	..	..	..	1
Other Epidemic Diseases	19	..	..	2	..	..	..	..	..	..	..
Rabies	23	..	..	..	1	..	..	..	..	..	..
Tetanus	24	1	..	..	1	..	..	1	..	..	..
Tuberculosis of the Lungs	28	..	..	2	1	4	13	29	21	33	31
Acute Miliary Tuberculosis	29	..	..	1	..	..	1	..	1	..	..
Tuberculous Meningitis	30	..	2	3	2	..	..	1	..	..	..
Abdominal Tuberculosis	31	..	1	..	..	..	..	..	1	1	1
Tuberculosis of Other Organs	34	..	..	..	..	..	1	..	..	..	1
Disseminated Tuberculosis	35	..	1	..	..	..	..	..	..	..	..
Rickets	36	..	..	1	..	..	..	..	..	..	..
Syphilis	37	..	1	1	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Buccal Cavity	39	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	1	1	..	..
Cancer and Other Malignant Tumors of the Peritoneum, Intestines, Rectum.	41	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Female Organs.	42	..	..	..	..	..	..	..	..	2	3
Cancer and Other Malignant Tumors of the Breast	43	..	..	..	..	..	..	..	..	..	1
Cancer and Other Malignant Tumors of the Skin	44	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified.	45	..	..	..	1	..	..	2	..	..	2
Other Tumors (tumors of the female genital organs excepted).	46	..	..	..	..	..	..	..	..	..	..
Acute Articular Rheumatism	47	..	..	..	1	1	..	..	..	..	..
Scurvy	49	..	..	..	..	..	..	..	..	..	..
Diabetes	50	..	..	..	..	..	..	..	1	1	..
Exophthalmic Goitre	51	..	..	..	..	..	..	..	..	..	1
Leuchæmia	53	..	..	..	..	..	..	..	..	..	..
Anæmia, Chlorosis	54	..	..	..	..	..	1	..	1	..	..
Other General Diseases	55	..	..	1	1	2	..	..	3	1	..
Alcoholism (acute or chronic)	56	..	..	..	..	..	..	..	..	..	1
Encephalitis	60	..	..	..	..	..	..	1	1	..	..
Simple Meningitis	61	1	6	10	4	3	2	..	..	2	1
Including Cerebrospinal Fever	61A	..	2	1	..	..	..	1	..	..	..
Locomotor Ataxia	62	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Spinal Cord	63	..	2	..	..	..	..	..	..	1	..
Cerebral Hæmorrhage, Apoplexy	64	..	..	..	..	..	2	..	1	3	2
Softening of the Brain	65	..	..	..	..	..	..	..	..	..	..
Paralysis Without Specified Cause	66	..	..	..	..	..	..	..	..	..	2
General Paralysis of the Insane	67	..	..	..	..	..	..	..	..	..	..
Other Forms of Mental Alienation	68	..	..	..	..	..	..	..	..	1	..
Epilepsy	69	..	..	1	..	..	1	..	..	..	..
Convulsions of Infants	71	..	4	4	4	..	..	..	..	..	..
Chorea	72	..	..	..	..	1	..	..	..	..	..
Neuralgia and Neuritis	73	..	..	..	..	..	..	..	1	1	..
Other Diseases of the Nervous System	74	..	..	..	..	..	..	..	..	..	..
Diseases of the Ears	76	..	..	1	..	..	..	..	..	..	..

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	1	..	..	..	..	..	..	5	4	.....	0	..	..	..	..	2	..	..	..	..	..	1	4	5	..	..
..	..	..	..	..	..	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	..	..	..	..	..	..	..	..	7	6	.....	12	..	..	..	..	..	..	1	..	..	..	..	..	13	..	..
..	..	..	..	..	..	..	..	..	9	9	.....	18	..	..	..	..	..	..	..	..	..	..	..	..	18	..	..
..	..	..	..	..	..	..	..	..	8	7	.....	14	..	..	..	1	..	..	..	..	..	..	..	..	15	..	..
..	..	..	..	..	..	..	..	..	2	2	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..
..	..	..	..	..	..	1	..	..	1	1	.....	1	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..
..	..	..	1	1	2	..	..	..	5	1	.....	1	2	..	..	..	2	..	..	..	..	..	..	1	2	4	..
..	..	..	..	..	..	1	..	..	3	1	.....	3	..	..	..	..	..	1	..	..	..	..	..	..	1	1	1	..
..	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	3	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	1	..	3	..	..
21	21	12	10	11	5	..	..	..	130	84	12	137	12	2	7	14	11	6	1	1	6	8	5	4	93	97	24	..
..	..	1	..	..	..	..	..	..	2	1	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
..	..	1	..	..	..	..	..	..	7	2	.....	8	..	..	..	1	..	..	..	..	..	..	..	..	..	9	..	..
1	..	..	..	..	..	..	..	..	3	1	.....	2	..	..	..	..	..	..	..	..	..	1	..	1	2	2	..	..
..	1	..	..	..	..	..	..	..	2	1	.....	1	1	..	..	..	..	..	..	..	1	..	..	..	2	1	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
1	..	..	..	..	..	..	..	..	2	1	.....	2	..	..	..	..	..	1	..	..	..	..	..	..	3	..	..	..
..	1	2	..	1	1	..	..	..	3	2	.....	2	..	..	..	1	..	2	..	..	..	..	..	..	1	2	2	..
1	6	6	14	20	11	..	..	..	32	28	.....	22	4	..	9	10	1	1	..	..	4	5	4	..	38	4	18	..
8	1	3	1	6	3	..	..	..	6	11	.....	4	1	..	3	2	..	1	..	1	..	2	2	1	13	..	4	..
1	..	2	2	2	..	..	..	..	..	12	.....	9	1	..	..	..	2	..	..	..	..	..	..	..	8	1	3	..
..	1	1	..	1	..	..	..	..	..	4	1	1	1	..	..	1	..	1	..	..	..	..	..	..	2	..	2	..
..	..	..	..	2	..	..	..	..	2	..	.....	..	..	..	..	2	..	..	..	..	..	..	..	..	2	..	..	..
..	1	..	1	2	3	..	..	..	8	4	.....	5	1	..	1	1	..	1	1	..	2	..	..	..	6	2	4	..
..	..	..	..	..	1	..	..	..	1	..	.....	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
1	..	..	..	..	..	..	..	..	..	1	.....	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..
1	..	1	..	3	3	1	..	..	6	5	1	0	..	..	..	1	..	..	..	1	1	2	..	..	5	2	4	..
..	..	..	..	..	..	..	..	..	..	1	.....	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..
..	1	..	..	..	..	..	..	..	1	..	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..
1	1	..	..	1	1	..	..	..	1	5	.....	3	1	..	..	1	..	..	..	..	1	..	..	..	4	1	1	..
2	..	..	..	..	..	..	..	..	7	3	.....	5	..	..	..	..	5	..	..	..	..	..	..	..	4	5	1	..
..	..	1	1	..	..	..	..	..	3	..	.....	2	1	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..
..	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	..	2	..	2	2	..	..	..	22	16	.....	32	..	..	1	8	1	..	..	..	..	..	1	..	5	32	1	..
..	..	..	1	..	..	..	..	..	2	3	.....	3	..	1	..	..	..	..	..	..	1	..	..	..	1	4	..	..
..	1	..	..	1	..	..	..	..	1	1	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	1	..	1	..
..	..	..	..	1	..	1	..	..	3	2	.....	4	..	..	..	..	..	..	..	..	..	..	1	..	1	3	1	..
3	4	5	12	32	20	0	1	..	40	51	.....	80	3	..	8	13	4	5	1	2	2	4	3	..	48	9	34	..
..	..	..	..	..	1	..	..	..	1	..	.....	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
1	1	..	..	4	4	1	..	..	7	0	.....	0	2	..	..	1	..	1	..	..	1	2	..	..	8	2	3	..
..	..	..	..	..	..	..	..	..	..	..	.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	2	1	1	1	1	..	..	..	5	2	.....	4	1	..	1	1	..	..	..	..	..	..	..	..	5	1	1	..
1	..	..	..	1	..	..	..	..	4	..	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	1	3	..	..
..	..	..	..	..	..	..	..	..	6	6	.....	12	..	..	..	..	..	..	..	..	..	..	..	..	..	12	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
1	..	..	..	..	1	..	..	..	2	2	.....	2	..	..	..	1	..	..	..	..	1	..	..	..	1	1	2	..
1	..	..	..	..	..	..	..	..	1	..	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..

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TABLE 39.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PATERSON.		AGE PERIODS.											
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Acute Endocarditis	78	2	....	....	4	4	2	..	4	..	1
Organic Diseases of the Heart	79	1	1	....	2	7	3	3	2	5	9
Angina Pectoris	80	....	....	....	..	..	..	..	..	..	1
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	....	....	....	..	..	..	1	..	..	..
Embolism and Thrombosis	82	....	....	....	..	..	..	..	..	..	1
Diseases of the Veins (varices, hæmorrhoids, phlebitis, etc.)	83	....	....	....	..	..	..	..	..	..	..
Diseases of the Larynx	87	1	1	2	2	..	..	..	..	..	..
Acute Bronchitis	89	3	3	....	..	..	..	..	..	..	..
Chronic Bronchitis	90	....	....	....	..	..	..	..	..	..	1
Bronchopneumonia	91	7	17	10	2	..	..	..	..	1	1
Pneumonia	92	1	16	20	5	..	1	3	5	4	7
Pleurisy	93	....	....	2	..	..	..	..	..	..	..
Pulmonary Congestion, Pulmonary Apoplexy	94	1	....	....	..	1	..	1	2	4	1
Ashma	96	....	....	....	..	..	..	..	..	..	2
Pulmonary Emphysema	97	....	....	....	..	..	..	1	..	..	..
Other Diseases of the Respiratory System (tuberculosis excepted).	98	1	....	....	..	..	..	1	..	1	..
Other Diseases of the Mouth and Annexa	99	....	....	....	..	..	..	..	..	..	..
Diseases of the Pharynx	100	....	1	....	..	..	..	..	..	..	1
Ulcer of the Stomach	102	....	....	....	..	..	..	..	..	..	..
Other Diseases of the Stomach (cancer excepted)	103	3	10	3	..	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	9	68	8	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	....	....	4	2	1	..	..	..	2	..
Appendicitis and Typhlitis	108	....	....	....	..	2	..	2	3	2	1
Hernias, Intestinal Obstructions	109	2	....	....	..	..	..	..	1	..	1
Other Diseases of the Intestines	110	1	....	....	..	..	..	..	..	..	..
Cirrhosis of the Liver	113	....	....	....	..	..	..	1	..	..	1
Biliary Calculi	114	....	....	....	..	..	..	..	..	..	..
Other Diseases of the Liver	115	....	....	....	..	..	..	..	..	1	1
Diseases of the Spleen	116	....	....	1	..	..	..	..	..	..	..
Simple Peritonitis (nonpuerperal)	117	....	....	....	..	..	..	..	..	1	..
Other Diseases of the Digestive System (cancer and tuberculosis excepted).	118	....	....	....	..	..	..	..	..	..	..
Acute Nephritis	119	....	....	....	..	1	..	1	1	..	1
Bright's Disease	120	1	....	1	1	..	1	2	2	5	8
Other Diseases of the Kidneys and Annexa	122	....	....	....	..	..	..	..	..	1	..
Calculi of the Urinary Passages	123	....	....	....	..	..	..	..	1	..	..
Diseases of the Bladder	124	....	....	....	..	..	..	..	..	..	..
Other Diseases of the Urethra, Urinary Abscess, etc.	125	....	....	....	..	..	..	..	..	..	..
Diseases of the Prostate	126	....	....	....	..	..	..	..	..	..	..
Uterine Tumor (noncancerous)	129	....	....	....	..	..	..	..	..	..	..
Other Diseases of the Uterus	130	....	....	....	..	..	..	..	..	..	1
Salpingitis and Other Diseases of the Female Genital Organs.	132	....	....	....	..	..	..	1	1	1	1
Accidents of Pregnancy	134	....	....	....	..	..	..	..	..	..	1
Puerperal Hæmorrhage	135	....	....	....	..	..	..	..	..	2	..
Other Accidents of Labor	136	....	....	....	..	..	..	..	2	..	1
Puerperal Septicæmia	137	....	....	....	..	..	..	3	4	1	2
Puerperal Albuminuria and Convulsions	138	....	....	....	..	..	..	..	..	2	1
Gangrene	142	....	....	....	..	..	..	..	..	..	..
Acute Abscess	144	....	....	....	..	1	..	..	..	..	..
Other Diseases of the Skin and Annexa	145	....	1	....	..	..	..	..	..	..	..
Diseases of the Bones (tuberculosis excepted)	148	....	....	....	3	..	..	..	..	..	..
Congenital Malformations (stillbirths not included)	150	1	....	....	1	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	78	1	....	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	5	9	....	..	..	..	..	..	..	..

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.								SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
3	9	4	10	28	26	10	1	..	59	49	4	88	13	2	12	27	6	3	1	..	1	2	3	..	13	23	41	1
7	8	16	12	28	28	8	1	..	84	57	2	68	14	..	11	15	7	8	1	..	5	8	3	1	71	20	40	1
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
..	2	1	..	2	5	3	..	..	6	3	.....	6	1	..	1	3	..	1	..	..	..	1	1	..	7	3	4	...
..	..	..	..	2	..	..	..	..	2	1	.....	1	..	..	..	1	..	..	..	..	..	..	1	..	1	..	2	...
1	..	..	..	..	..	..	..	..	1	..	.....	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
..	..	..	..	..	..	..	..	..	2	4	.....	6	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	...
..	..	..	..	3	3	2	..	..	5	9	.....	10	..	..	..	3	..	..	..	..	..	1	..	..	2	7	5	...
..	..	..	..	5	1	1	1	..	3	6	.....	2	..	..	1	5	..	1	..	..	..	..	..	..	3	..	6	...
1	2	..	5	1	6	2	1	..	22	27	2	40	1	..	3	2	1	1	..	..	..	2	..	..	6	38	12	...
6	8	11	12	20	11	1	..	..	77	54	7	77	7	1	3	21	9	2	1	..	..	2	7	1	53	30	18	1
..	3	3	1	3	2	..	..	..	8	6	.....	7	3	..	1	1	..	..	..	..	..	1	1	..	6	4	4	...
2	1	2	1	2	3	1	3	..	9	16	2	12	..	..	1	5	1	1	1	..	1	2	..	1	13	5	7	...
..	..	1	..	4	3	..	..	..	4	6	.....	1	..	1	..	2	..	2	..	..	2	1	..	1	4	2	4	...
..	..	..	..	..	1	..	..	..	1	1	.....	1	..	..	..	..	..	1	..	..	..	..	..	..	..	1	1	...
3	..	..	1	1	1	..	..	..	4	5	.....	7	..	..	..	..	..	..	..	..	..	..	2	..	4	2	3	...
..	..	..	..	..	1	..	..	..	1	..	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	...
..	..	..	..	1	..	..	..	..	2	1	.....	2	..	..	..	1	..	..	..	..	..	..	..	..	1	2	..	..
1	1	..	..	1	..	..	..	..	2	1	.....	..	..	..	..	3	..	..	..	..	..	..	..	..	1	1	1	...
1	1	..	..	1	3	2	..	..	10	13	1	19	1	..	3	..	..	..	1	..	..	..	..	..	4	17	2	...
..	..	..	..	..	..	..	..	..	33	52	5	84	..	..	..	..	..	..	..	..	..	..	..	..	..	85	..	...
1	1	..	2	6	5	3	..	..	13	14	.....	12	1	1	..	5	1	3	..	..	1	1	2	..	6	10	10	1
1	..	1	..	..	..	..	..	..	7	5	.....	11	1	..	..	..	..	..	..	..	..	..	..	..	5	7	..	...
1	..	..	4	2	3	..	..	..	6	8	.....	7	1	..	2	1	..	1	..	..	..	2	..	..	6	4	4	...
1	..	..	2	2	1	..	..	..	3	2	.....	5	..	..	..	..	..	..	..	..	..	..	..	..	3	2	..	...
1	2	..	3	4	1	..	..	..	7	3	.....	5	1	..	3	1	1	1	..	..	..	..	1	..	5	3	5	...
..	1	..	..	..	..	..	..	..	..	1	.....	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	...
1	..	1	..	1	2	..	..	..	4	3	.....	2	1	..	1	1	2	..	..	..	..	..	..	..	6	..	1	...
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	...
..	..	..	..	..	..	1	..	..	1	1	.....	..	1	..	..	..	..	..	..	..	..	1	..	..	..	1	1	...
1	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
1	..	1	..	1	..	1	..	..	5	3	.....	6	1	..	..	..	..	..	..	..	..	..	..	..	3	5	..	...
10	12	16	18	38	25	6	..	..	86	60	5	65	18	2	10	27	6	8	1	..	2	5	1	1	82	20	38	...
1	..	1	1	..	1	..	..	..	3	2	.....	2	..	..	..	..	1	1	..	..	1	..	..	..	4	..	1	...
..	..	..	..	1	..	1	..	..	1	3	.....	..	1	..	..	..	..	..	..	..	..	..	3	..	1	..	3	...
..	..	..	1	2	1	..	..	..	4	..	.....	1	1	..	1	..	1	..	..	..	..	..	..	..	2	..	2	...
..	1	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
..	..	1	..	2	1	1	1	..	6	..	.....	3	..	..	..	..	..	..	..	..	1	2	..	..	3	1	2	...
..	2	1	..	..	..	..	..	..	..	3	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	...
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
..	..	1	..	..	..	..	..	..	..	5	.....	5	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	...
2	..	..	..	..	..	..	..	..	..	3	.....	1	..	..	..	1	..	1	..	..	..	..	..	..	3	..	..	...
2	..	..	..	..	..	..	..	..	..	4	.....	1	1	..	..	..	2	..	..	..	..	..	..	..	4	..	..	...
..	..	..	..	..	..	..	..	..	..	3	.....	2	..	..	..	..	..	..	1	..	..	..	..	..	3	..	..	...
..	..	..	..	..	..	..	..	..	..	11	.....	7	1	..	..	..	3	..	..	..	..	..	..	..	8	..	3	...
..	..	..	..	..	..	..	..	..	..	3	.....	2	..	..	1	..	..	..	..	..	..	..	..	..	3	..	..	...
..	..	..	..	..	1	..	..	..	..	1	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	...
..	..	..	..	2	..	..	..	..	2	1	.....	1	..	1	1	..	..	..	..	..	..	..	..	..	..	1	2	...
..	..	..	..	..	..	..	..	..	3	..	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	...
..	..	..	..	..	..	..	..	..	..	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	...
..	..	..	..	..	..	..	..	..	46	33	.....	79	..	..	..	..	..	..	..	..	..	..	..	..	..	79	..	...
..	..	..	..	..	..	..	..	..	9	5	3	14	..	..	..	..	..	..	..	..	..	..	..	..	..	14	..	...

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TABLE 39.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PATERSON.		AGE PERIODS.										
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Senility	154	..	..	..	..	..	..	..	..	..	..
Suicide by Poison	155	..	..	..	..	..	2	1	1	1	..
Suicide by Asphyxia	156	..	..	..	..	..	..	..	..	1	..
Suicide by Hanging or Strangulation	157	..	..	..	..	..	..	..	..	..	..
Suicide by Drowning	158	..	..	..	..	..	..	..	..	..	..
Suicide by Firearms	159	..	..	..	..	..	..	..	..	..	..
Suicide by Cutting or Piercing Instruments	160	..	..	..	..	..	..	..	..	1	..
Other Acute Poisonings	165	..	..	1	..	..	..	..	..	2	..
Burns (conflagration excepted)	167	..	..	7	1	1	1	..	..	..	1
Absorption of Deleterious Gases (conflagration excepted)	168	..	..	..	..	..	..	1	..	..	..
Accidental Drowning	169	..	..	1	2	1	1	..	1	..	1
Traumatism by Firearms	170	..	..	..	..	..	1	..	..	..	..
Traumatism by Fall	172	..	1	2	1	..	..	1	1	1	..
Traumatism by Machines	174	..	..	..	..	1	..	..	1	..	..
Traumatism by Other Crushing (vehicles, railroad landslides, etc.)	175	..	..	..	3	2	3	4	1	0	3
Injuries by Animals	176	..	..	..	..	..	1	1	..	1	..
Effects of Heat	179	1	1	..	..	..	1	..	..	1	..
Homicide by Firearms	182	..	..	..	..	..	..	1	1	..	..
Homicide by Cutting or Piercing Instruments	183	..	..	..	..	..	..	..	..	..	1
Homicide by Other Means	184	1	..	..	..	..	..	..	..	1	1
Ill-defined Organic Disease	187	..	..	..	..	..	..	..	..	..	..
Cause of Death not Specified or Ill-defined	189	5	18	5	..	..	..	..	..	..	..

Total deaths, 1891. Death-rate, 14.73.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.									SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	..	..	..	3	8	2	..	5	3	.....	3	2	..	2	2	1	..	1	..	..	..	..	2	1	1	1	11	...
1	..	..	..	2	..	..	..	..	4	4	.....	5	..	..	1	..	..	1	..	..	..	..	1	..	3	4	1	...
..	2	..	2	1	..	..	..	..	3	3	.....	2	..	..	..	..	..	..	..	..	1	..	2	1	3	1	2	...
1	1	1	1	..	..	..	..	..	3	1	1	2	..	..	1	..	1	..	..	..	..	..	..	..	3	..	1	...
1	..	..	..	..	..	..	..	..	1	..	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	...	...
..	..	1	..	1	..	..	..	..	1	1	.....	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	...	...
..	..	..	..	1	..	..	..	..	4	..	.....	2	..	..	..	..	..	..	1	..	..	1	..	..	1	2	1	...
..	..	1	..	..	..	..	..	..	0	3	.....	11	..	..	..	..	1	..	..	..	..	..	..	..	2	10	..	...
1	4	1	1	..	..	1	..	..	4	5	.....	4	..	..	2	2	..	..	..	..	..	..	1	..	4	3	2	...
..	..	1	..	..	..	..	..	..	7	1	.....	4	..	..	..	..	2	..	..	..	..	..	2	..	3	5	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	....
..	2	2	2	1	4	..	1	..	13	3	.....	10	1	1	2	2	1	..	..	..	1	..	1	..	8	6	5	...
..	..	..	..	..	..	..	..	..	2	..	.....	1	..	..	..	..	1	..	..	..	..	..	..	..	1	1	..	...
3	..	5	4	4	4	..	..	..	34	8	2	24	2	1	..	6	3	..	..	..	1	1	2	2	20	15	7	...
..	..	..	..	..	..	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	...
4	1	1	1	2	2	..	..	..	12	3	.....	7	1	..	2	1	3	..	..	..	..	..	1	..	5	6	4	...
1	..	..	..	..	..	..	..	..	3	..	.....	..	..	..	..	..	2	..	..	..	1	..	..	..	1	2	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
..	..	..	..	..	..	..	..	..	1	2	.....	1	..	..	..	..	1	..	..	..	..	..	1	..	1	2	..	...
..	..	..	..	..	..	1	..	..	..	1	.....	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	...
..	..	..	..	..	..	..	2	..	13	17	.....	27	..	..	3	..	..	..	..	..	..	..	..	..	1	28	1	...

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TABLE 40.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PERTH AMBOY.	AGE PERIODS.												
	Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1	....	....	....	1	..	1	1	..	..	....	..	..
Malaria 4	....	....	....	..	..	..	..	..	1	....	..	..
Including Malarial Cachexia 4A	....	1	....	..	..	..	..	..	..	....	..	..
Measles 6	....	....	2	..	..	..	..	..	..	....	..	..
Scarlet Fever 7	....	....	3	2	1	..	..	..	..	....	..	..
Whooping Cough 8	....	5	2	..	..	..	..	..	..	....	..	..
Diphtheria and Croup 9	....	1	10	2	1	..	..	..	1	....	..	..
Including Croup 9A	....	....	2	1	..	..	..	..	..	....	..	..
Influenza 10	....	....	....	..	..	..	..	..	..	....	..	..
Dysentery 14	....	1	1	..	..	..	..	..	..	....	..	..
Erysipelas 18	....	....	....	..	..	..	..	..	..	....	..	1
Purulent Infection and Septichæmia 20	....	....	....	..	..	..	..	..	..	....	..	1
Rabies 23	....	....	....	..	..	..	1	..	..	....	..	..
Tuberculosis of the Lungs 28	....	....	1	..	1	3	6	5	2	2	5	1
Acute Miliary Tuberculosis 29	....	....	....	..	..	..	..	..	..	....	..	..
Tuberculous Meningitis 30	....	....	1	..	..	..	..	..	..	....	..	..
Abdominal Tuberculosis 31	....	....	....	..	..	..	1	..	..	....	..	..
Tuberculosis of Other Organs 34	....	....	....	1	..	..	..	..	..	....	..	..
Disseminated Tuberculosis 35	....	....	....	..	..	..	..	..	..	....	1	..
Rickets 36	....	....	1	..	..	..	..	..	..	....	..	..
Syphilis 37	....	....	....	..	..	..	..	..	..	....	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver 40	....	....	....	..	..	..	..	1	..	1	2	1
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum 41	....	....	....	..	..	..	..	..	..	....	..	1
Cancer and Other Malignant Tumors of the Female Genital Organs 42	....	....	....	..	..	..	..	..	..	....	1	1
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified 45	....	....	....	..	..	..	..	..	..	....	..	..
Diabetes 50	....	....	1	..	..	..	..	..	..	....	..	..
Anæmia, Chlorosis 54	....	....	....	..	..	1	..	..	..	....	..	..
Other General Diseases 55	....	....	....	..	..	..	1	..	..	1	..	..
Alcoholism (acute or chronic) 56	....	....	....	..	..	..	..	..	..	1	..	..
Simple Meningitis 61	....	1	3	1	..	1	..	1	..	..	..	1
Including Cerebrospinal Fever 61A	....	....	1	..	..	..	..	..	..	....	..	..
Locomotor Ataxia 62	....	....	....	..	..	..	..	..	..	....	..	..
Other Diseases of the Spinal Cord 63	....	....	1	..	..	..	..	..	..	2	..	..
Cerebral Hæmorrhage, Apoplexy 64	....	....	....	..	..	..	..	..	..	....	1	..
Paralysis Without Specified Cause 66	....	....	....	..	..	..	..	..	..	....	..	..
Other Forms of Mental Alienation 68	....	....	....	..	..	..	..	..	..	....	..	..
Epilepsy 69	....	....	....	..	..	..	..	..	..	....	..	1
Convulsions of Infants 71	....	3	4	..	..	..	..	..	..	....	..	..
Pericarditis 77	....	....	....	..	..	..	..	..	..	....	..	..
Acute Endocarditis 78	2	....	....	..	..	..	..	1	..	....	..	2
Organic Diseases of the Heart 79	....	....	....	..	1	1	..	..	1	....	1	1
Diseases of the Larynx 87	....	1	....	1	..	..	..	..	..	....	..	..
Acute Bronchitis 89	1	6	1	1	..	..	..	..	..	....	..	..
Bronchopneumonia 91	....	2	....	..	..	..	..	..	..	....	..	..
Pneumonia 92	1	13	6	..	1	..	1	..	..	2	..	..
Pleurisy 93	....	....	....	..	..	..	..	1	..	1	..	..
Pulmonary Congestion, Pulmonary Apoplexy 94	....	....	....	..	..	..	..	..	..	....	..	..
Asthma 96	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Pharynx 100	....	1	....	..	..	..	..	..	..	....	..	..
Other Diseases of the Stomach (cancer excepted) 103	1	3	1	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (under 2 years) 104	3	55	15	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (2 years and over) 105	....	....	1	..	..	..	1	..	..	....	1	..
Appendicitis and Typhlitis 108	....	....	....	..	..	..	..	..	..	....	1	..
Hernias, Intestinal Obstructions 109	....	....	....	..	..	..	..	..	..	....	..	..
Cirrhosis of the Liver 113	....	....	....	..	..	..	..	..	..	....	1	1
Simple Peritonitis (nonpuerperal) 117	....	1	....	..	..	..	..	..	..	....	..	..

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	1	...	...	...	...	...	2	2	.....	4	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	...
...	...	...	...	...	...	...	1	...	.....	...	...	...	...	...	...	...	...	...	...	...	1	...	....	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
...	...	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	....	2	...	...
...	...	...	...	...	...	...	3	3	.....	5	...	...	...	...	...	...	...	1	...	...	...	...	....	6	...	...
...	...	...	...	...	...	...	3	4	.....	7	...	...	...	...	...	...	...	...	...	...	...	...	....	7	...	...
...	...	...	...	...	...	...	9	15	.....	14	...	...	...	...	...	...	...	...	1	...	...	...	....	15	...	...
...	...	...	...	...	...	...	2	1	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	....	3	...	...
...	...	1	...	...	...	...	1	...	.....	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	....	2	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	1	...	...	...	...	...	....	1	...	...
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3	...	...	1	...	...	...	13	17	.....	12	...	...	1	...	1	1	6	2	5	...	2	...	16	14	...	...
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2	...	...	...	...	...	...	2	...	.....	...	...	...	2	...	...	...	...	...	...	...	...	...	1	1	...	...
...	1	2	...	2	...	...	5	5	.....	2	...	...	1	1	...	2	3	1	...	...	...	...	6	2	2	...
...	...	1	1	...	...	...	2	1	.....	...	...	...	...	1	...	...	1	1	...	...	...	...	3	...	...	...
1	1	...	...	...	...	...	...	1	.....	2	...	...	...	...	...	...	1	1	...	...	...	...	4	...	...	...
...	...	1	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	1	...	...	...	1	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
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...	...	...	...	...	...	...	2	3	.....	7	...	...	...	...	...	...	1	...	...	...	...	...	1	7	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
1	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	1	...	...	...	2	2	.....	2	...	...	...	...	...	...	1	1	...	...	...	...	3	1	...	...
2	...	1	2	1	...	...	5	3	.....	3	2	...	...	...	...	...	1	...	...	...	...	1	2	1	3	1
...	...	...	1	1	...	...	...	2	.....	...	...	...	1	...	...	...	...	1	...	...	...	...	1	...	1	...
...	...	...	...	1	...	...	1	...	.....	...	...	...	...	...	...	...	...	1	...	...	...	...	....	...	1	...
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...	...	...	...	...	...	...	3	4	.....	7	...	...	...	...	...	...	...	...	...	...	...	...	....	7	...	...
...	...	1	...	...	...	...	...	1	.....	...	...	...	...	...	1	...	...	...	...	...	...	...	....	...	1	...
1	1	3	2	...	...	...	7	5	.....	4	...	...	1	3	...	...	2	2	...	...	...	...	5	5	2	...
1	...	6	4	1	...	...	10	7	.....	7	...	...	...	6	...	...	2	2	...	...	...	...	5	3	3	1
...	...	...	...	...	...	...	...	2	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	....	2	...	...
...	...	...	...	...	...	...	4	5	.....	9	...	...	...	...	...	...	...	...	...	...	...	...	....	9	...	...
...	1	...	...	1	...	...	2	2	.....	2	...	...	...	...	...	...	...	2	...	...	...	...	1	2	1	...
...	1	2	...	1	...	...	15	13	.....	23	...	...	...	...	...	1	1	1	2	...	...	...	4	23	1	...
...	...	...	...	...	...	...	1	1	.....	1	...	...	...	...	...	...	1	...	...	...	...	...	....	2	...	...
...	...	1	1	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
1	1	...	...	...	...	...	1	1	.....	1	...	...	...	...	...	...	1	...	...	...	...	...	2	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...
...	...	...	...	...	...	...	3	2	.....	5	...	...	...	...	...	...	...	...	...	...	...	...	....	5	...	...
...	...	...	...	...	...	...	36	42	.....	78	...	...	...	...	...	...	...	...	...	...	...	...	....	78	...	...
...	...	1	3	...	...	...	3	4	.....	3	...	...	...	2	...	...	1	...	1	...	...	...	1	4	2	...
...	...	...	...	...	...	...	1	...	.....	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...
...	1	...	...	1	...	...	1	1	.....	2	...	...	...	2	...	...	...	...	...	...	...	...	1	1	...	...
...	2	...	...	...	...	...	2	2	.....	1	...	...	...	1	...	...	2	1	...	...	...	...	3	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	....	1	...	...

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TABLE 40.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PERTH AMBOY.	AGE PERIODS.												
	Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Bright's Disease 120	....	1	1	2	1	1	..	..	1	3	1	..
Calculi of the Urinary Passages 123	....	....	....	..	..	..	..	..	..	....	..	..
Other Diseases of the Uterus 130	....	....	....	..	..	..	..	..	1	....	..	..
Accidents of Pregnancy 134	....	....	....	..	..	..	..	1	..	....	..	..
Puerperal Hæmorrhage 135	....	....	....	..	..	..	..	1	..	....	1	..
Puerperal Septichæmia 137	....	....	....	..	..	..	..	..	1	....	..	..
Puerperal Albuminuria and Convulsions 138	....	....	....	..	..	..	1	..	1	....	..	..
Acute Abscess 144	....	....	1	..	..	..	..	..	..	....	..	..
Other Diseases of the Skin and Annexa....145	....	....	....	..	..	..	..	..	..	....	..	..
Congenital Malformations (stillbirths not included) ..150	3	1	....	..	..	..	..	..	..	....	..	..
Congenital Debility, Icterus, and Sclerema...151	38	1	....	..	..	..	..	..	..	....	..	..
Other Diseases Peculiar to Early Infancy....152	10	4	....	..	..	..	..	..	..	....	..	..
Senility 154	....	....	....	..	..	..	..	..	..	....	..	..
Suicide by Hanging or Strangulation 157	....	....	....	..	..	..	..	1	..	....	..	..
Burns (conflagration excepted) 167	....	....	1	1	..	..	..	..	1	....	..	..
Absorption of Deleterious Gases (conflagration excepted) ..168	....	....	....	..	..	1	..	..	..	....	..	1
Accidental Drowning 169	....	....	1	..	1	2	1	1	1	1	..	..
Traumatism by Cutting or Piercing Instruments ..171	....	....	....	..	..	..	..	..	..	....	1	..
Traumatism by Fall 172	....	....	....	1	1	..	..	2	..	1	..	..
Traumatism by Other Crushing Vehicles, railroad, landslides, etc.) ..175	....	....	2	1	1	..	..	2	2	3	1	2
Injuries by Animals 176	....	....	....	..	..	..	..	..	..	....	..	..
Excessive Cold 178	....	....	....	..	..	..	1	..	..	....	..	..
Effects of Heat 179	....	....	....	..	..	..	..	..	..	....	..	1
Homicide by Firearms 182	....	....	....	..	..	..	2	..	..	....	..	..
Cause of Death Not Specified or Ill-defined...189	....	5	4	..	..	..	..	..	..	....	..	..

Total deaths, 468. Death-rate, 14.03.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
4	...	4	1	3	..	..	12	11	.....	10	1	1	1	3	..	..	4	..	1	..	2	..	11	9	3	...
...	...	...	1	...	..	..	...	1	.....	...	..	..	..	1	..	..	..	..	..	..	..	..	....	....	1	...
...	...	...	...	...	..	..	...	1	.....	...	..	..	..	..	..	..	1	..	..	..	..	..	1	....	...	...
...	...	...	...	...	..	..	...	1	.....	...	..	..	..	..	..	..	1	..	..	..	..	..	1	....	...	...
...	...	...	...	...	..	..	...	2	.....	1	..	..	..	..	..	..	..	1	..	..	..	..	1	....	1	...
...	...	...	...	...	..	..	...	1	.....	...	..	..	..	..	..	..	1	..	..	..	..	..	1	....	...	...
...	...	...	...	...	..	..	...	2	.....	1	..	..	..	..	..	..	1	..	..	..	..	..	2	....	...	...
...	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
1	...	...	1	...	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	2	...	...	...
...	...	...	...	...	..	..	2	2	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	....	4	...	...
...	...	...	...	...	..	..	25	14	.....	39	..	..	..	..	..	..	..	..	..	..	..	..	....	39	...	...
...	...	...	...	...	..	..	9	5	.....	14	..	..	..	..	..	..	..	..	..	..	..	..	....	14	...	...
...	...	2	1	2	..	..	3	2	.....	2	..	..	..	1	1	..	..	..	1	..	..	..	1	1	3	...
...	...	...	...	...	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
...	...	...	...	...	..	..	2	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	1	1	2	...	...
...	...	...	...	...	..	..	2	...	.....	...	..	..	..	..	..	..	..	2	..	..	..	..	1	1	...	...
...	...	1	...	...	..	..	3	1	.....	5	..	..	..	1	..	..	..	1	1	..	..	1	....	7	1	1
...	...	...	...	1	..	..	1	1	.....	...	..	..	..	2	..	..	..	..	..	..	..	..	1	....	1	...
...	...	1	...	...	..	..	6	...	.....	3	..	..	..	1	..	..	1	..	1	..	..	..	2	4	...	...
1	3	...	...	...	..	..	16	2	.....	7	..	..	..	..	1	..	1	3	4	..	3	..	8	8	2	...
1	...	...	...	...	..	..	1	...	.....	...	..	..	..	..	..	..	..	..	..	..	1	..	1	....	...	...
...	...	...	...	...	..	..	1	...	.....	...	1	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	...	...	...	..	..	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
...	...	...	...	...	..	..	2	...	.....	...	..	..	..	..	2	..	..	..	..	..	..	..	....	2	...	...
...	...	...	...	...	..	..	5	4	.....	9	..	..	..	..	..	..	..	..	..	..	..	..	....	9	...	...

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TABLE 41.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PHILLIPSBURG.		AGE PERIODS.										
		Under one month	Under 1 yr. "not including under 1 mo."	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Measles	6	....	3	2	1	..	..	..	..	..	..
Whooping Cough	8	....	2	2	..	..	..	..	..	..	..
Diphtheria and Croup	9	....	1	....	1	..	..	..	..	..	..
Including Croup	9A	....	....	1	..	..	..	..	..	..	..
Influenza	10	....	....	....	..	..	..	..	..	..	..
Other Epidemic Diseases	19	....	....	1	..	..	..	..	..	..	..
Tuberculosis of the Lungs	28	....	....	....	..	..	..	..	..	3	1
Acute Miliary Tuberculosis	29	....	....	....	1	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver.	40	....	....	....	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum.	41	....	....	....	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Female Genital Organs.	42	....	....	....	..	..	..	..	..	..	1
Acute Articular Rheumatism	47	....	....	....	..	..	1	1	..	..	..
Diabetes	50	....	....	....	..	..	..	..	..	..	..
Anæmia, Chlorosis	54	....	....	....	..	..	..	..	..	..	..
Simple Meningitis	61	....	2	....	..	..	..	..	..	..	..
Locomotor Ataxia	62	....	....	....	..	..	..	..	..	1	..
Other Diseases of the Spinal Cord	63	....	....	....	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	....	....	....	..	..	..	..	..	..	..
Paralysis Without Specified Cause	66	....	....	....	..	..	..	..	..	..	..
Other Forms of Mental Alienation	68	....	....	....	..	..	..	..	..	..	..
Convulsions of Infants	71	....	1	....	..	..	..	..	..	..	..
Other Diseases of the Nervous System	74	....	....	....	..	..	..	..	..	..	1
Pericarditis	77	....	....	....	..	..	..	..	..	..	..
Acute Endocarditis	78	....	....	....	..	..	..	..	..	..	..
Organic Diseases of the Heart	79	....	....	....	..	..	..	..	..	..	2
Angina Pectoris	80	....	....	....	..	..	..	..	..	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	....	....	....	..	..	..	..	..	..	..
Embolism and Thrombosis	82	....	....	....	..	..	..	..	1	..	..
Bronchopneumonia	91	....	1	1	..	..	..	..	..	..	..
Pneumonia	92	5	3	4	..	..	1	1	1	1	1
Pleurisy	93	....	....	1	..	..	..	1	..	..	..
Pulmonary Congestion, Pulmonary Apoplexy	94	....	....	....	..	..	..	..	..	..	..
Ulcer of the Stomach	102	....	....	....	..	..	..	..	..	..	..
Other Diseases of the Stomach (cancer excepted)	103	....	1	....	..	..	..	..	..	1	..
Diarrhœa and Enteritis (under 2 years)	104	2	9	2	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	....	....	....	..	..	..	..	..	..	..
Other Diseases of the Intestines	110	....	....	....	1	..	..	..	..	..	..
Cirrhosis of the Liver	113	....	....	....	..	..	..	..	..	..	..
Other Diseases of the Digestive System (cancer and tuberculosis excepted.	118	....	....	1	..	..	..	..	..	..	..
Bright's Disease	120	....	....	....	..	..	..	..	..	..	..
Calculi of the Urinary Passages	123	....	....	....	..	..	..	..	..	..	..
Diseases of the Bladder	124	....	....	....	..	..	..	..	..	..	..
Accidents of Pregnancy	134	....	....	....	..	..	..	..	..	1	..
Puerperal Hæmorrhage	135	....	....	....	..	..	..	..	..	..	1
Congenital Malformations (stillbirths not included)	150	....	1	....	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	9	....	....	..	..	..	..	..	..	..
Senility	154	....	....	....	..	..	..	..	..	..	..
Suicide by Asphyxia	156	....	....	....	..	..	..	..	..	..	..
Suicide by Firearms	159	....	....	....	..	..	..	..	..	..	..
Accidental Drowning	169	....	....	....	..	..	..	..	..	..	..
Traumatism by Firearms	170	....	....	....	..	1	..	..	..	..	..
Traumatism by Fall	172	....	....	....	..	..	..	..	..	..	1
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	....	....	2	..	1	..	..	..	1	..
Effects of Heat	179	....	....	....	..	..	..	..	..	..	..

Total deaths, 183. Death-rate, 13.06.

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AGE PERIODS.									SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black," designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	..	..	..	..	..	..	..	5	2	.....	7	..	..	..	..	..	..	..	..	..	..	..	..	....	7	..	...
..	..	..	..	..	..	..	..	..	1	3	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	....	4	..	...
..	..	..	..	..	..	..	..	..	..	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
..	..	..	..	2	1	..	..	..	..	3	.....	1	..	..	..	2	..	..	..	..	..	..	..	..	1	..	2	...
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
1	..	..	1	2	..	1	..	..	6	3	.....	8	..	..	..	1	..	..	..	..	..	..	..	..	6	1	2	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
..	..	..	1	1	1	..	..	..	1	2	.....	1	..	..	..	1	1	..	..	..	..	..	..	..	....	1	2	...
..	..	..	..	1	..	..	..	..	1	..	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	....	..	1	...
..	1	..	..	..	1	..	..	..	..	3	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	...
..	1	..	..	..	..	..	..	..	2	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	1	2	1	..	...
..	..	..	..	2	1	..	..	..	..	3	.....	2	..	..	1	..	..	..	..	..	..	..	..	..	1	..	2	...
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1	..	1	3	4	3	2	..	..	7	7	.....	6	..	..	3	4	..	..	..	..	..	..	..	1	8	1	5	...
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..	2	..	3	1	2	3	..	..	7	6	.....	11	..	..	..	1	..	..	..	..	..	..	..	1	7	1	5	...
..	..	..	..	..	2	1	..	..	2	1	.....	2	..	..	..	1	..	..	..	..	..	..	..	..	1	..	2	...
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
..	1	1	..	2	4	1	..	..	10	10	.....	13	..	..	..	2	1	..	1	..	..	..	..	..	8	14	4	...
..	1	..	..	..	1	..	..	..	1	3	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	3	1	..	...
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1	..	1	..	..	..	1	..	..	1	4	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	...
..	..	..	..	..	..	..	..	..	9	4	.....	13	..	..	..	..	..	..	..	..	..	..	..	..	....	13	..	...
..	..	..	1	..	..	1	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	...
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1	2	1	..	3	4	..	..	..	6	5	.....	7	..	..	..	3	..	..	..	..	..	..	..	1	3	3	5	...
..	..	..	..	1	..	..	..	..	1	..	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	....	1	..	...
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..	..	..	..	..	..	..	..	..	4	5	.....	9	..	..	..	..	..	..	..	..	..	..	..	..	....	9	..	...
..	..	..	..	..	1	..	1	..	..	2	.....	1	..	..	1	..	..	..	..	..	..	..	..	..	....	..	2	...
..	..	..	1	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
..	..	..	2	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	...
..	1	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
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..	..	..	..	..	..	..	..	..	3	1	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	1	3	..	...
..	..	1	..	..	1	..	..	..	2	..	.....	1	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	...

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TABLE 42.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PLAINFIELD.	AGE PERIODS.											
	Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1	....	....	....	..	..	2	..	..	1	1	1	..
Scarlet Fever 7	....	....	1	..	..	..	..	..	..	..	..	..
Whooping Cough 8	....	1	....	..	..	..	..	..	..	..	..	..
Diphtheria and Croup 9	....	....	....	1	1	..	..	..	..	..	..	..
Including Croup 9A	....	....	....	..	..	..	..	..	..	..	..	..
Influenza 10	....	....	....	..	..	..	..	..	1	..	..	..
Dysentery 14	....	1	2	..	..	..	..	..	..	..	..	..
Tuberculosis of the Lungs 28	....	....	....	1	..	2	4	6	..	2	3	3
Tuberculous Meningitis 30	....	....	1	1	1	..	..	..	..	..	..	..
Abdominal Tuberculosis 31	....	....	....	..	..	..	..	1	..	1	..	..
Syphilis 37	....	1	....	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Buccal Cavity 39	....	....	....	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver 40	....	....	....	..	..	..	..	..	1	1	..	1
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum 41	....	....	....	..	..	..	..	..	1	....	..	1
Cancer and Other Malignant Tumors of the Female Genital Organs 42	....	....	....	..	..	..	..	..	..	....	1	2
Cancer and Other Malignant Tumors of the Breast 43	....	....	....	..	..	..	..	..	..	....	..	1
Cancer and Other Malignant Tumors of the Skin 44	....	....	....	..	..	..	..	..	..	....	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified 45	....	....	....	..	..	..	..	..	..	....	..	1
Acute Articular Rheumatism 47	....	....	....	..	1	..	..	..	..	....	..	..
Diabetes 50	....	....	....	1	..	..	..	..	1	1	..	..
Anæmia, Chlorosis 54	....	....	....	..	..	..	..	..	..	....	..	..
Other General Diseases 55	....	....	....	..	..	..	..	1	..	....	..	..
Alcoholism (acute or chronic) 56	....	....	....	..	..	..	..	..	..	....	1	..
Simple Meningitis 61	....	....	1	..	..	1	..	..	..	....	..	..
Other Diseases of the Spinal Cord 63	....	....	....	..	..	..	..	..	..	1	..	..
Cerebral Hæmorrhage, Apoplexy 64	....	....	....	..	..	..	..	..	1	1	..	2
Paralysis Without Specified Cause 66	....	....	....	..	..	..	..	..	..	1	..	..
Other Forms of Mental Alienation 68	....	....	....	..	..	..	..	..	..	....	1	..
Epilepsy 69	....	....	....	..	..	..	..	..	1	....	..	..
Other Diseases of the Nervous System 74	....	....	....	..	..	..	..	..	..	....	..	..
Pericarditis 77	....	....	....	..	..	..	..	1	..	....	1	..
Acute Endocarditis 78	....	....	....	1	..	..	..	..	..	....	..	2
Organic Diseases of the Heart 79	....	1	1	..	..	..	..	1	1	....	..	1
Angina Pectoris 80	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc. 81	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Lymphatic System (lymphangitis, etc.) 84	....	....	....	..	..	..	..	1	..	....	..	..
Chronic Bronchitis 90	....	....	....	..	..	..	..	..	..	....	..	1
Bronchopneumonia 91	1	1	2	..	..	..	..	..	1	....	..	..
Pneumonia 92	2	....	1	..	1	..	..	..	1	....	..	2
Pulmonary Congestion, Pulmonary Apoplexy 94	1	....	....	..	..	..	..	..	..	1	1	1
Gangrene of the Lung 95	....	....	....	..	..	..	..	..	..	....	..	..
Other Diseases of the Mouth and Annexa 99	....	....	1	..	..	..	..	..	..	....	..	..
Diseases of the Pharynx 100	....	....	1	..	..	..	..	..	..	....	..	..
Ulcer of the Stomach 102	....	....	....	..	..	..	..	..	..	....	..	1
Other Diseases of the Stomach (cancer excepted) 103	3	1	1	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (under 2 years) 104	1	3	3	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (2 years and over) 105	....	....	2	..	..	..	..	..	..	....	..	..
Appendicitis and Typhlitis 108	....	....	....	..	..	2	..	..	2	....	..	..
Hernias, Intestinal Obstructions 109	....	....	....	..	..	..	..	..	..	....	..	..
Other Diseases of the Intestines 110	....	....	....	1	..	..	..	..	..	1	..	..
Cirrhosis of the Liver 113	....	....	....	..	..	..	..	..	..	....	..	..

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AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	3	2	.....	4	..	..	..	..	..	..	..	..	..	..	1	..	3	2	...	...
...	...	...	...	...	...	...	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	...	...	...	...	...	1	1	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	....	2	...	...
...	...	1	...	...	1	..	1	2	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	...
...	...	...	...	...	...	...	2	1	2	3	..	..	..	..	..	..	..	..	..	..	..	..	....	3	...	...
2	1	1	2	...	...	...	15	12	7	19	1	..	..	4	1	..	..	..	..	..	2	..	17	8	2	...
...	...	...	...	...	...	...	3	...	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	....	3	...	...
...	...	...	...	...	...	...	1	1	1	1	..	..	..	1	..	..	..	..	..	..	..	..	1	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
...	1	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	...
2	1	2	4	2	...	...	4	10	.....	11	1	..	..	..	..	1	..	1	..	..	..	..	6	1	7	...
...	...	...	1	...	...	...	1	2	.....	2	..	..	..	..	1	..	..	..	..	..	..	..	1	....	2	...
...	...	1	...	1	...	...	...	5	.....	3	..	..	..	..	..	..	..	..	..	..	2	..	4	....	1	...
...	...	3	...	...	...	...	...	4	1	3	..	..	1	..	..	..	..	..	..	..	..	..	....	....	4	...
...	...	...	1	...	...	...	1	...	.....	...	..	..	..	1	..	..	..	..	..	..	..	..	1	....	...	...
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1	...	...	...	...	...	...	...	1	.....	...	..	..	1	..	..	..	..	..	..	..	..	..	1	...	...	...
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1	...	...	...	...	...	...	1	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	2	...	...	...
...	...	...	...	...	...	...	1	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	...	...
1	...	1	...	...	...	...	2	1	1	2	..	..	1	..	..	..	..	..	..	..	..	..	3	...	...	...
...	1	3	5	1	1	..	6	15	3	18	..	..	..	2	..	..	..	..	..	..	..	..	7	2	11	...
...	...	2	...	1	...	...	1	3	1	3	1	..	..	..	..	..	..	..	..	..	..	..	2	...	2	...
...	...	...	1	...	...	...	1	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1	...
...	...	...	1	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
...	...	...	1	...	...	...	...	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	....	...	1	...
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...	...	...	4	2	...	...	1	3	.....	6	2	..	1	..	..	..	..	..	..	..	..	..	3	2	5	...
2	...	...	1	...	1	...	4	5	.....	7	1	..	..	..	..	..	..	..	..	..	1	..	1	5	3	...
...	...	2	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	2	...	...	...
...	...	1	...	2	...	...	1	2	1	3	..	..	..	..	..	..	..	..	..	..	..	..	1	....	2	...
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...	...	...	...	...	...	...	...	1	.....	...	..	..	..	..	..	..	..	1	..	..	..	..	1	....	...	...
...	...	...	...	...	...	...	2	2	3	5	..	..	..	..	..	..	..	..	..	..	..	..	4	1	...	...
1	1	5	1	6	...	...	10	11	1	16	..	..	..	4	..	..	..	1	..	..	..	..	6	5	10	...
1	...	1	2	...	...	...	5	3	2	5	..	..	1	..	..	..	..	..	..	..	1	1	4	1	3	...
...	...	...	1	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	...
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...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
...	...	...	1	...	...	...	3	3	2	6	..	..	..	..	..	..	..	..	..	..	..	..	....	5	1	...
...	...	...	...	...	...	...	9	3	.....	12	..	..	..	..	..	..	..	..	..	..	..	..	....	12	...	...
...	...	...	1	1	...	...	1	3	1	4	..	..	..	..	..	..	..	..	..	..	..	..	....	2	2	...
...	...	...	...	...	...	...	3	1	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	2	2	...	...
...	...	...	1	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	...	1	...
...	...	...	...	...	...	...	2	...	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
...	...	...	1	...	...	...	1	...	.....	...	1	..	..	..	..	..	..	..	..	..	..	..	....	...	1	...

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TABLE 42.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PLAINFIELD.	AGE PERIODS.												
	Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Other Diseases of the Liver 115	....	....	....	..	..	..	..	..	..	....	..	..
Acute Nephritis 119	....	....	....	..	..	..	..	..	..	....	..	..
Bright's Disease 120	....	1	....	..	..	..	1	1	1	1	1	1
Calculi of the Urinary Passages 123	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Bladder 124	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Prostate 126	....	....	....	..	..	..	..	..	..	....	..	..
Uterine Tumor (noncancerous) 129	....	....	....	..	..	..	..	..	..	1	..	..
Other Diseases of the Uterus 130	....	....	....	..	..	..	..	..	..	....	..	..
Accidents of Pregnancy 134	....	....	....	..	..	..	..	1	..	1	..	..
Puerperal Hæmorrhage 135	....	....	....	..	..	..	..	1	..	....	..	..
Puerperal Septichæmia 137	....	....	....	..	..	..	1	..	..	....	..	..
Puerperal Albuminuria and Convulsions 138	....	....	....	..	..	..	..	..	..	1	..	..
Congenital Debility, Icterus, and Sclerema...151	12	1	....	..	..	..	..	..	..	....	..	..
Other Diseases Peculiar to Early Infancy....152	....	2	....	..	..	..	..	..	..	....	..	..
Senility 154	....	....	....	..	..	..	..	..	..	....	..	..
Suicide by Poison 155	....	....	....	..	..	..	..	..	..	1	..	..
Suicide by Firearms 159	....	....	....	..	..	..	..	..	..	....	..	..
Burns (conflagration excepted) 167	....	....	....	..	..	..	..	..	..	....	..	..
Traumatism by Firearms 170	....	....	....	..	..	1	..	..	..	....	..	..
Traumatism by Fall 172	....	....	....	..	..	..	..	1	..	1	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) ..175	....	....	....	..	..	2	1	..	1	....	1	1
Effects of Heat 179	....	....	....	..	..	..	..	..	..	....	..	..
Cause of Death Not Specified or Ill-defined...189	....	3	....	..	..	..	..	..	..	....	..	..

Total deaths, 295. Death-rate, 14.07.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	1	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	1	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
2	...	4	4	2	...	...	9	12	2	16	1	...	1	...	...	...	1	...	1	...	...	1	11	3	7	...
...	...	...	1	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	3	...	...	...	3	...	.....	2	...	1	...	...	...	...	...	...	...	...	...	...	1	...	2	...
...	1	...	1	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	1	...	...	...	...	...	1	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	3	.....	2	...	...	...	...	1	...	...	...	...	...	...	...	3	...	...	...
...	...	...	...	...	...	...	...	2	.....	...	...	...	...	1	...	...	1	...	...	...	...	...	2	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...
...	...	...	...	...	...	...	7	6	2	13	...	...	...	...	...	...	...	...	...	...	...	...	...	13	...	...
...	...	...	...	...	...	...	1	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	...	2	2	...	1	3	.....	3	...	...	1	...	...	...	...	...	...	...	...	...	1	1	2	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	1	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	1	...	...	...	...	...	1	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	2	...	...	...	...	2	1	.....	2	...	1	1	...	...	...	...	...	...	...	...	...	1	2	1	...
2	1	1	...	...	...	...	10	...	1	3	1	...	1	1	...	3	...	...	...	...	...	1	5	5	...	...
1	...	...	...	...	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	2	1	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...

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TABLE 43.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN PRINCETON.	AGE PERIODS.									
	Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Scarlet Fever 7	....	....	....	..	1	..	..	..	..	..
Whooping Cough 8	....	1	....	..	..	..	..	..	..	..
Dysentery 14	....	....	....	..	..	..	..	..	..	..
Tuberculosis of the Lungs 28	....	....	....	..	1	..	4	1	..	..
Tuberculosis of Other Organs 34	....	....	....	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver. 40	....	....	....	..	1	..	..	..	..	1
Cancer and Other Malignant Tumors of the Breast 43	....	....	....	..	..	..	..	..	..	..
Diabetes 50	....	....	....	..	..	..	..	..	..	..
Alcoholism (acute or chronic) 56	....	....	....	..	1	..	..	..	..	..
Other Diseases of the Spinal Cord 63	....	....	....	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy 64	....	....	....	..	..	..	..	..	..	..
Convulsions of Infants 71	....	1	....	..	..	..	..	..	..	..
Acute Endocarditis 78	....	....	....	..	..	..	1	..	..	..
Organic Diseases of the Heart 79	....	....	....	..	..	..	..	..	..	..
Acute Bronchitis 89	....	....	....	..	..	..	..	..	..	..
Pneumonia 92	....	1	....	..	..	..	..	..	..	..
Pleurisy 93	....	....	1	..	..	..	..	..	..	..
Ulcer of the Stomach 102	....	....	....	..	..	..	..	..	..	..
Other Diseases of the Stomach (cancer excepted) 103	....	1	....	..	..	..	..	1	..	..
Diarrhœa and Enteritis (under 2 years) 104	....	1	....	..	..	..	..	..	..	..
Appendicitis and Typhlitis 108	....	....	....	..	..	..	..	..	..	..
Other Diseases of the Liver 115	1	....	....	..	..	..	..	..	..	1
Bright's Disease 120	....	....	....	..	..	1	..	..	..	1
Congenital Debility, Icterus, and Sclerema 151	2	....	....	..	..	..	..	..	..	..
Senility 154	....	....	....	..	..	..	..	..	..	..
Suicide by Drowning 158	....	....	....	..	..	..	..	..	..	..
Suicide by Firearms 159	....	....	....	..	..	..	1	..	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) } 175	....	....	....	..	..	..	..	..	..	..
Cause of Death not Specified or Ill-defined 189	1	....	....	..	..	..	..	..	..	..

Total deaths, 73. Death-rate, 14.73.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	..	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	1	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	1	..	..	..	..	..	..	..	2	4	2	6	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3	1	..
1	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	1	..	..	..	..	..	..	1	2	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..
..	1	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	1	1	1	..	..	..	1	2	.....	2	..	..	..	1	..	..	..	..	..	..	..	..	..	3	..	..	..
..	1	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	1	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	2	..	..	..	1	1	1	..	2	3	1	4	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	3	..
..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	1	..	..	..	..	..	..	..	1	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
..	2	1	1	3	..	2	..	..	5	4	3	8	..	..	..	..	..	..	..	..	..	..	..	..	1	6	1	2	..
..	..	..	..	..	..	1	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
2	1	2	1	2	..	..	..	..	5	4	4	7	..	..	..	1	..	1	..	..	..	..	..	..	..	5	2	2	..
..	..	..	..	..	..	1	..	..	2	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..
..	..	..	..	..	1	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	1	..	1	..	..	..	..	..	1	3	3	3	..	..	..	1	..	..	..	..	..	..	..	..	..	2	1	1	..
..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	1	..	..	..	..	..	1	..	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	1	..	..	..	..	3	2	2	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	..	..
..	..	1	..	..	2	1	..	..	4	2	.....	2	1	..	1	2	..	..	..	..	..	..	..	..	..	2	1	3	..
..	..	..	..	..	..	..	..	..	2	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
..	..	..	..	1	1	..	1	..	..	3	1	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	3	..
1	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
1	..	..	..	..	..	..	..	..	1	..	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..

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TABLE 44.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN RAHWAY.		AGE PERIODS.										
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Typhoid Fever	1	..	..	..	..	..	1	..	..	..	..
Influenza	10	..	..	..	..	..	..	..	..	..	..
Purulent Infection and Septichæmia	20	..	..	..	1	..	..	..	..	..	..
Tuberculosis of the Lungs	28	..	..	..	..	..	3	..	1	..	1
Tuberculous Meningitis	30	..	1	1	..	..	..	..	..	..	..
Abdominal Tuberculosis	31	..	..	..	..	..	..	..	..	..	1
Disseminated Tuberculosis	35	..	..	1	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Breast	43	..	..	..	..	..	..	..	..	1	..
Cancer and Other Malignant Tumors of the Skin	44	..	..	..	..	..	..	..	..	..	..
Diabetes	50	..	..	..	..	..	..	..	..	..	..
Other General Diseases	55	..	..	1	..	..	..	..	..	..	..
Other Diseases of the Spinal Cord	63	..	..	..	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	..	..	..	..	..	..	..	..	..	..
Paralysis Without Specified Cause	66	..	..	..	..	..	..	..	..	..	..
Convulsions of Infants	71	..	1	..	..	..	..	..	..	..	..
Organic Diseases of the Heart	79	..	..	..	..	..	..	..	1	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	..	..	..	..	..	..
Bronchopneumonia	91	1	1	..	..	..	..	..	..	..	..
Pneumonia	92	..	2	..	..	..	..	..	..	..	..
Other Diseases of the Stomach (cancer excepted)	103	1	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	..	4	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	..	..	..	..	..	..	..	..	..	..
Bright's Disease	120	..	..	..	1	..	..	..	..	..	..
Calculi of the Urinary Passages	123	..	..	..	..	..	..	..	..	..	..
Congenital Malformations (stillbirths not included	150	1	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	5	1	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	1	..	..	..	..	..	..	..	..	..
Lack of Care	153	1	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..
Suicide by Hanging or Strangulation	157	..	..	..	..	..	..	..	..	..	..
Absorption of Deleterious Gases (conflagration excepted	168	..	..	..	..	..	..	..	..	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	..	..	..	..	..	1	..	..	..	..

Total deaths 102. Death-rate, 11.19.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
					1	1			1			1			1	1											1		
									1	1																		2	
										1		1															1		
2	1		1						6	3		9													4	4	1	
									2		1	2														2		
										1		1													1			
									1			1														1		
		1	1	2	5				6	3		7	1			1									5	1	3	
										1		1													1			
					1					1						1											1	
						1			1	1		2													1	1		
	1		1	4	7	4			5	12	2	15				1					1				5	1	11	
					1	1			1	1		1												1		1	1	
									1			1															1	
				2	2				2	3	1	5													2	1	2	
						1			1			1																1
						3			1	4		5													1	2	2	
	1		4	3	1				5	6		8	1		1	1									5	3	3	
										1		1														1		
									3	1	1	4														4		
					1					1		1														1		
		1		4	5				4	7	1	11													5	2	4	
				1					1			1														1		
										1		1														1		
									2	4	1	6														6		
										1		1														1		
									1			1														1		
					1					1						1											1	
				1					1			1													1			
	1									1			1							1					1			
									1																	1		

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TABLE 45.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN RED BANK.	AGE PERIODS.												
	Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Diphtheria and Croup 9			2									
Influenza 10												
Tuberculosis of the Lungs 28						2	2	1	1	1	1	1
Tuberculous Meningitis 30			2		1							
Rickets 36			1									
Cancer and Other Malignant Tumors of the Stomach, Liver ...40												
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum ...41												
Cancer and Other Malignant Tumors of the Female Genital Organs ...42												
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified ...45												
Other Tumors (tumors of the female genital organs excepted) ...46												
Other General Diseases 55					1							
Alcoholism (acute or chronic) 56												1
Simple Meningitis 61		1	1	1								
Including Cerebrospinal Fever 61A		1										
Cerebral Hæmorrhage, Apoplexy 64												1
Paralysis Without Specified Cause 66												
Acute Endocarditis 78				1								
Organic Diseases of the Heart 79		1										1
Acute Bronchitis 89	1	3	1									
Bronchopneumonia 91		5										
Pneumonia 92		1										
Pleurisy 93						1					1	
Pulmonary Congestion, Pulmonary Apoplexy...94												
Other Diseases of the Stomach (cancer excepted) ...103	1	1										
Diarrhœa and Enteritis (under 2 years) 104		6										
Appendicitis and Typhlitis 108										1		
Hernias, Intestinal Obstructions 109			1									
Simple Peritonitis (nonpuerperal) 117												
Bright's Disease 120						1				1	1	1
Calculi of the Urinary Passages 123												
Puerperal Hæmorrhage 135									1			
Puerperal Septichæmia 137						1						
Congenital Debility, Icterus, and Sclerema...151	5	1										
Suicide by Poison 155								1				
Suicide by Asphyxia 156												
Suicide by Hanging or Strangulation 157												
Suicide by Firearms 159												
Burns (conflagration excepted) 167				1								
Cause of Death Not Specified or Ill-defined...189		1										1

Total deaths, 115. Death-rate, 15.08.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
							1	1		2														2		
				1				1		1															1	
		2					7	4	1	10			1											3	7	1
							3		2	3															3	
							1		1	1															1	
	1	1					1	1		2														1		1
		1						1		1														1		
		1						1		1																1
				1				1						1										1		
	1							1		1														1		
							1		1	1															1	
							1	1		1															3	
							1	2		3															1	
								1		1														3		
1		1					1	2	1	3														1		4
		2	1	3			3	3		4				2										4	1	1
		3	2				3	3	2	6														1	2	5
1	5	3	2	2			9	6	3	14												1		8	5	2
		1		1			2	5	1	7															5	
							3	2	2	5															1	1
			1				1	1		1				1											2	1
		1	1				4			4														1		1
		1		1				2		2															3	
							1	1		2																6
							2	4		6															1	
							1		1	1																1
								1		1																1
			1					1						1												3
		2	1	1			3	5	2	5	1											1	1		5	
	1							1					1												1	
								1		1															1	
								1	1	1																1
							4	2		6															6	
							1							1											1	
			1				1			1										1				1		
		1					1																		1	
		1					1															1				
								1		1					1										1	
							1	1		1																

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TABLE 46.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN RIDGEWOOD.		AGE PERIODS.										
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Typhoid Fever	1	..	..	..	..	..	..	..	1	..	..
Diphtheria and Croup	9	..	..	1	..	..	..	..	..	..	..
Tuberculosis of the Lungs	28	..	..	..	..	..	..	..	1	..	1
Acute Miliary Tuberculosis	29	..	..	..	1	..	..	..	..	..	..
Tuberculous Meningitis	30	..	1	..	..	..	..	..	..	..	..
Disseminated Tuberculosis	35	..	..	..	..	1	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Peritoneum, Intestines, Rectum.	41	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Female Genital Organs.	42	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Breast	43	..	..	..	..	..	..	..	..	..	1
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified.	45	..	..	..	..	..	..	..	..	..	..
Alcoholism (acute or chronic)	56	..	..	..	..	..	..	..	..	..	..
Simple Meningitis	61	..	1	..	..	..	..	..	..	..	..
Including Cerebrospinal Fever	61A	..	..	..	1	..	..	..	..	..	..
Other Diseases of the Spinal Cord	63	..	..	..	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	..	..	..	..	..	..	..	..	1	1
Paralysis Without Specified Cause	66	..	..	..	..	..	..	..	..	..	..
Acute Endocarditis	78	..	..	..	..	..	..	..	..	..	..
Organic Diseases of the Heart	79	..	..	..	..	..	..	..	..	..	..
Pneumonia	92	2	..	..	..	..	..	..	..	..	..
Pleurisy	93	..	..	..	..	..	..	..	..	..	..
Ulcer of the Stomach	102	..	..	..	..	..	..	..	..	..	..
Appendicitis and Typhlitis	105	..	..	..	1	..	..	..	..	..	..
Bright's Disease	120	..	..	..	..	..	..	..	..	..	..
Uterine Tumor (noncancerous)	129	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Uterus	130	..	..	..	..	..	..	..	..	..	..
Cysts and Other Tumors of the Ovary	131	..	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	3	..	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	2	..	..	..	..	..	..	..	..	..
Traumatism by Fall	172	..	..	..	..	..	..	..	..	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	..	..	1	..	..	..	..	..	..	..

Total deaths, 70. Death-rate, 12.27.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
									1			1														1		
																										1		
				1					2	1		1									1		1		2	1		
										1		1														1		
										1		1														1		
									1			1														1		
			1							1		1														1		
	1									1		1														1		
1										1		1															1	
										1		1														1		
				1						1		1															1	
	1								1			1														1			
										1		1															1	
										1		1															1	
1	1		2	4	2		1		5	8		7				5						1			6	2	5	
				2	1	1			1	3		1				3										3	1	
		1	2		1				1	3						4										2	2	
			1	1	2	3			4	3		4				3									3		3	1
		1	1	2		1			4	3		4	1			2									1	3	3	
1		1							1	1		2													1		1	
					1					1						1											1	
									1			1														1		
		1		1	1				2	1	1	3													1	2		
1										1		1														1		
		1								1		1													1			
					1				1						1												1	
									3			3														3		
									1	1		2														2		
1				1					1	1		1				1									1		1	
									1			1															1	

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TABLE 47 —TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN ROOSEVELT.		AGE PERIODS.										
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Scarlet Fever	7	....	1	....	2	..	..	..	..	..	..
Whooping Cough	8	....	1	....	..	..	..	..	..	..	..
Diphtheria and Croup	9	....	....	1	1	..	..	..	..	..	..
Including Croup	9A	1	....	....	..	..	..	..	..	..	..
Tuberculosis of the Lungs	28	....	....	1	..	..	2	..	..	..	2
Tuberculous Meningitis	30	....	....	2	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver.	40	....	....	....	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified.	45	....	....	1	..	..	..	..	..	..	..
Other Tumors (tumors of the Female Genital organs excepted).	46	....	....	....	..	..	..	..	..	..	..
Leuchæmia	53	....	....	....	..	..	..	..	..	..	1
Simple Meningitis	61	....	....	....	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	....	....	....	..	..	..	..	..	..	..
Paralysis Without Specified Cause	66	....	....	....	..	..	..	..	..	..	..
Organic Diseases of the Heart	79	....	....	....	..	..	..	1	..	..	..
Acute Bronchitis	89	1	1	....	..	..	..	..	..	..	..
Bronchopneumonia	91	1	1	3	..	..	..	..	..	..	..
Pneumonia	92	1	2	....	..	1	..	..	..	..	..
Other Diseases of the Stomach (cancer excepted)	103	....	2	....	..	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	4	15	8	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	....	....	1	..	..	..	..	..	..	..
Bright's Disease	120	....	....	....	..	..	..	..	..	..	..
Puerperal Hæmorrhage	135	....	....	....	..	..	..	..	2	..	..
Other Accidents of Labor	136	....	....	....	..	..	..	..	1	..	..
Congenital Malformations (stillbirths not included)	150	1	....	....	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	2	....	....	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	1	....	....	..	..	..	..	..	..	..
Suicide by Drowning	158	....	....	....	..	..	..	..	..	1	..
Suicide by Crushing	162	....	....	....	..	..	..	1	..	..	..
Traumatism by Machines	174	....	....	....	..	..	..	1	..	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	....	1	....	..	..	..	..	..	..	..
Cause of Death not Specified or Ill-defined	189	1	2	1	..	..	..	..	..	..	..

Total deaths, 87. Death-rate, 15.04.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	..	..	..	..	..	..	..	3	..	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	....	3	..	...
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
..	..	..	..	..	..	..	..	..	1	1	.....	1	..	..	..	..	..	..	..	..	1	..	..	..	....	2	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
..	..	..	..	..	..	..	..	..	2	3	.....	3	..	..	..	1	..	..	1	..	..	..	..	..	2	3	..	...
..	..	..	..	..	..	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	..	...
1	..	..	..	..	..	..	..	..	..	1	.....	....	..	..	..	..	..	..	..	..	1	..	..	..	1	....	..	...
..	..	..	1	..	..	..	..	..	1	..	.....	....	1	..	..	..	..	..	..	..	..	..	..	..	1	....	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	....	..	..	..	..	1	..	..	..	..	..	..	..	1	....	..	...
..	1	..	..	..	..	..	..	..	1	..	.....	....	..	..	..	..	..	..	1	..	..	..	..	..	1	....	..	...
..	..	1	..	..	..	1	..	..	..	2	.....	1	..	..	..	..	..	..	1	..	..	..	..	..	1	....	1	...
..	..	..	..	1	..	..	..	..	1	..	.....	....	1	..	..	..	..	..	..	..	..	..	..	..	1	....	..	...
..	..	..	..	..	1	..	..	..	2	..	.....	....	..	..	..	1	..	..	1	..	..	..	..	..	....	1	1	...
..	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	..	...
..	..	..	..	..	..	..	..	..	1	4	.....	4	..	..	..	..	1	..	..	..	..	..	..	..	....	5	..	...
1	1	..	1	..	..	..	..	..	4	3	.....	5	..	..	..	..	..	1	1	..	..	..	..	..	1	5	1	...
..	..	..	..	..	..	..	..	..	..	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	..	...
..	..	..	..	..	..	..	..	..	14	13	.....	27	..	..	..	..	..	..	..	..	..	..	..	..	....	27	..	...
..	..	..	..	1	..	..	..	..	1	1	.....	1	..	..	..	..	..	..	..	..	1	..	..	..	1	1	..	...
..	..	..	1	1	..	..	..	..	1	1	.....	....	..	..	2	..	..	..	..	..	..	..	..	..	2	....	..	...
..	..	..	..	..	..	..	..	..	..	2	.....	1	..	..	..	..	..	..	1	..	..	..	..	..	2	....	..	...
1	..	..	..	..	..	..	..	..	..	2	.....	....	..	..	..	..	..	..	..	..	2	..	..	..	2	....	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
..	..	..	..	..	..	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	..	...
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	....	..	..	..	..	..	..	..	1	..	..	..	..	....	1	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	....	..	..	..	..	..	..	..	..	..	..	..	1	....	....	..	1
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	...
..	..	..	..	..	..	..	..	..	2	2	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	....	4	..	...

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TABLE 48.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN RUTHERFORD.		AGE PERIODS.											
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Measles	6		1	1									
Including Croup	9A			1									
Influenza	10										1		
Tuberculosis of the Lungs	28							1	1		1		
Tuberculous Meningitis	30		1	1									
Cancer and Other Malignant Tumors of the Buccal Cavity	39												
Cancer and Other Malignant Tumors of the Stomach, Liver	40												
Cancer and Other Malignant Tumors of the Female Genital Organs	42												
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified	45												
Simple Meningitis	61												
Cerebral Hæmorrhage, Apoplexy	64												1
Convulsions of Infants	71			1									
Acute Endocarditis	78			1	1								
Organic Diseases of the Heart	79					1							
Angina Pectoris	80												
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81												
Chronic Bronchitis	90												
Bronchopneumonia	91												
Pneumonia	92			1									
Pulmonary Congestion, Pulmonary Apoplexy	94		1										
Ulcer of the Stomach	102			1									
Bright's Disease	120										1		
Congenital Debility, Icterus, and Sclerema	151	2											
Senility	154												
Suicide by Asphyxia	156												
Suicide by Hanging or Strangulation	157												1
Accidental Drowning	169									1			1
Traumatism by Fall	172										1		
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175												
Homicide by Other Means	184	1											

Total deaths, 57. Death-rate, 7.69.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
								2		2														2		
							1			1														1		
							1			1													1			
		1					2	2		4													2	1	1	
							1	1		2														2		
	1						1			1													1			
	1							1						1											1	
			1					1		1													1			
		1					1			1															1	
	1			3			1	3	1	3	1												2		3	
							1			1														1		
							1	1		2														2		
1		1	1	5			2	7	2	6			3										4	1	4	
			1					1		1															1	
		2	1	2			3	3		4				1									4		1	
			1					1		1															1	
				1				1		1															1	
							1			1														1		
		1		1			2	1		2			1										1	1	1	
							1	1		1														1		
1		1					1	2		2				1									3			
							1	1		2														2		
					1			1		1															1	
		1					1										1						1			
							1						1													
							2			2														2		
							1													1				1		
		1						1		1															1	
								1	1	1														1		

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TABLE 49.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN SALEM CITY.		AGE PERIODS.											
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1											1	
Diphtheria and Croup	9			1									
Influenza	10												
Tetanus	24					1							
Tuberculosis of the Lungs	28						1	1	3		1		1
Tuberculous Meningitis	30		1						1				
Cancer and Other Malignant Tumors of the Stomach, Liver	40												
Cancer and Other Malignant Tumors of the Female Genital Organs	42										1		
Cancer and Other Malignant Tumors of the Breast	43												
Cancer and Other Malignant Tumors of the Skin	44												
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified	45												
Anæmia, Chlorosis	54												
Alcoholism (acute or chronic)	56												
Simple Meningitis	61		1	1									
Cerebral Hæmorrhage, Apoplexy	64								1				
Paralysis Without Specified Cause	66												
Other Forms of Mental Alienation	68			1									
Acute Endocarditis	78								1				
Organic Diseases of the Heart	79								1			1	
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81												
Chronic Bronchitis	90												
Bronchopneumonia	91		1										
Pneumonia	92			1								1	
Pleurisy	93												
Asthma	96												
Ulcer of the Stomach	102												
Other Diseases of the Stomach (cancer excepted)	103		1										
Diarrhœa and Enteritis (under 2 years)	104		5	1									
Diarrhœa and Enteritis (2 years and over)	105												
Other Diseases of the Intestines	110			1									
Other Diseases of the Liver	115									2			
Bright's Disease	120												
Gangrene	142												
Congenital Malformations (stillbirths not included)	150		1										
Congenital Debility, Icterus, and Sclerema	151	5											
Other Diseases Peculiar to Early Infancy	152		1										
Senility	154												
Suicide by Poison	155												
Conflagration	166											1	
Burns (conflagration excepted)	167												
Traumatism by Fall	172												
Cause of Death Not Specified or Ill-defined	189	1		1									

Total deaths, 104. Death-rate, 15.64.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	...
...	...	...	...	...	...	...	1	...	1	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
...	...	...	...	1	1	..	2	...	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	2	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
...	...	1	...	...	...	...	5	3	3	7	..	..	..	1	..	..	..	..	..	..	..	..	3	5	...	...
...	...	...	...	...	...	...	2	...	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
...	1	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	...
...	...	...	1	...	...	...	...	2	2	2	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1	...
1	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	...
...	...	...	...	1	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	...
...	...	1	...	...	...	...	...	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	...
...	...	1	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
1	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	...
...	...	...	...	...	...	...	...	2	1	2	..	..	..	..	..	..	..	..	..	..	..	..	...	2	...	...
...	...	5	1	2	...	...	4	5	2	9	..	..	..	..	..	..	..	..	..	..	..	..	5	2	2	...
...	1	2	4	1	...	...	3	5	1	8	..	..	..	..	..	..	..	..	..	..	..	..	4	3	2	...
...	...	...	...	...	...	...	1	...	1	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
...	...	...	1	...	...	...	2	...	1	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
...	1	2	1	1	...	...	2	5	5	6	..	..	..	1	..	..	..	..	..	..	..	..	5	1	1	...
...	...	...	...	1	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
...	...	...	1	...	...	...	...	1	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	...	...	1	...
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
...	1	2	...	4	...	...	5	4	2	9	..	..	..	..	..	..	..	..	..	..	..	..	2	2	5	...
...	...	...	...	1	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	...	...	1	...
1	...	...	...	...	...	...	...	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
1	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
...	...	...	...	...	...	...	3	3	.....	6	..	..	..	..	..	..	..	..	..	..	..	..	...	6	...	...
...	...	...	1	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
...	...	...	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	2	...	...	...
1	...	2	4	1	...	...	3	5	.....	7	..	..	..	..	..	..	..	..	..	..	..	1	6	1	1	...
...	...	...	1	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
...	...	...	...	...	...	...	3	2	1	5	..	..	..	..	..	..	..	..	..	..	..	..	...	5	...	...
...	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
...	...	...	...	3	1	...	3	1	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	...
...	...	1	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	...
...	...	...	...	...	...	...	1	...	1	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
...	...	...	1	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	...	...
...	...	...	1	...	...	...	...	1	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	...	...	1	...
...	...	...	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	...	2	...	...

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TABLE 50.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN SOMERVILLE.		AGE PERIODS.										
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Typhoid Fever	1	..	..	..	..	..	..	..	2	..	..
Dysentery	14	..	..	..	..	..	..	..	..	..	..
Tetanus	24	..	..	..	..	..	..	..	..	..	1
Tuberculosis of the Lungs	28	..	..	..	1	..	..	1	..	1	2
Tuberculous Meningitis	30	..	1	2	..	..	..	..	..	..	..
Rickets	36	..	..	1	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver.	40	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Peritoneum, Intestines, Rectum.	41	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified.	45	..	..	..	..	..	..	..	..	..	..
Other General Diseases	55	..	..	1	..	..	..	..	..	..	..
Chronic Lead Poisoning	57	..	..	..	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	..	..	..	..	..	..	..	..	1	..
Paralysis Without Specified Cause	66	..	..	..	..	..	..	..	..	..	..
Epilepsy	69	..	..	..	..	..	..	..	..	..	..
Acute Endocarditis	78	..	..	1	..	..	..	..	..	..	..
Organic Diseases of the Heart	79	..	..	..	..	..	..	..	..	..	..
Angina Pectoris	80	..	..	..	..	..	..	..	..	..	1
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	..	..	..	..	..	..
Acute Bronchitis	89	..	1	..	..	..	..	..	..	..	..
Bronchopneumonia	91	..	..	..	..	..	1	..	..	..	..
Pneumonia	92	..	1	..	..	..	1	..	1	..	1
Pleurisy	93	..	..	..	..	..	..	..	..	..	1
Pulmonary Congestion, Pulmonary Apoplexy	94	..	..	..	1	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	..	2	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	..	..	..	..	..	..	..	..	..	..
Hernias, Intestinal Obstructions	109	..	..	..	..	..	..	..	..	..	..
Bright's Disease	120	..	..	..	..	..	..	..	..	..	..
Puerperal Albuminuria and Convulsions	138	..	..	..	..	..	..	..	..	..	1
Gangrene	142	..	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	5	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..
Suicide by Poison	155	..	..	..	..	..	..	..	1	..	..
Traumatism by Fall	172	..	..	..	..	..	..	..	..	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	..	..	..	..	..	1	1	1	..	..
Homicide by Firearms	183	..	..	..	..	..	..	..	..	..	..
Cause of Death not Specified or Ill-defined	189	..	1	..	..	..	..	..	..	..	..

Total deaths, 96. Death-rate, 19.16.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	1	..	..	..	..	..	..	..	2	1	..	1	..	..	1	1	..	..	..	..	..	..	..	1	....	3	..	..
..	..	..	..	..	..	2	..	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	....	....	2	..
..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	..
..	1	..	1	..	..	..	..	..	1	3	3	3	..	..	1	..	..	..	..	..	..	..	..	..	4	2	1	..
..	..	..	..	..	..	..	..	..	2	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	..	..
..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	..
..	..	..	1	1	..	1	..	..	1	2	..	2	..	..	1	..	..	..	..	..	..	..	..	..	2	....	1	..
..	..	..	..	..	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	..
..	..	..	..	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	..
..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	..
1	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	..
..	..	..	..	2	2	4	..	..	3	6	1	8	..	..	1	..	..	..	..	..	..	..	..	..	3	1	5	..
..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..
1	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	..
..	..	1	..	1	1	..	..	..	1	3	..	3	..	..	..	1	..	..	..	..	..	..	..	..	1	1	2	..
..	..	1	..	..	3	2	..	..	2	4	1	4	1	..	..	1	..	..	..	..	..	..	..	..	2	..	4	..
..	..	..	1	..	1	..	..	..	1	2	..	2	..	..	1	..	..	..	..	..	..	..	..	..	1	....	2	..
..	..	..	..	..	..	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	..
..	..	..	..	..	..	..	1	..	1	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	....	1	1	..
..	..	..	..	..	..	1	..	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
..	..	1	1	2	1	1	..	..	6	4	1	9	..	..	..	..	1	..	..	..	..	..	..	..	3	3	4	..
..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	..	..
..	..	..	1	..	..	..	..	..	2	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	..
..	..	..	..	..	..	..	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	..	..
..	..	..	..	..	..	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	1	..
..	..	..	..	2	..	..	..	..	2	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	2	....	..	..
..	1	1	..	2	2	..	..	..	6	..	2	6	..	..	..	..	..	..	..	..	..	..	..	..	3	3	..	..
..	1	..	..	2	..	..	..	..	2	2	..	2	..	..	1	..	..	..	..	..	..	..	..	..	2	....	..	..
..	..	..	..	2	..	..	..	..	2	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	2	....	..	..
..	..	..	..	..	..	..	..	..	3	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	....	5	..	..
..	..	..	..	..	2	..	1	..	3	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	1	....	2	..
1	..	..	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..	1	..	..	..	..	..	2	....	..	..
1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	....	..	..
..	..	..	1	..	..	..	..	..	4	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	1	3	..	..
..	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	....	....	..	1
..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	..

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TABLE 51.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN SOUTH AMBOY.	AGE PERIODS.												
	Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1												1
Whooping Cough 8		2	2									
Diphtheria and Croup 9			2									
Including Croup 9A				1								
Influenza 10												
Tuberculosis of the Lungs 28						1	2		1	2	1	
Cancer and Other Malignant Tumors of the Stomach, Liver 40											1	
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum 41												1
Diabetes 50											1	
Alcoholism (acute or chronic) 56												
Simple Meningitis 61		1										
Other Diseases of the Spinal Cord 63												
Cerebral Hæmorrhage, Apoplexy 64			1									
Paralysis Without Specified Cause 66												
Epilepsy 69											1	
Convulsions (nonpuerperal) 70					1							
Convulsions of Infants 71	1	1	1									
Acute Endocarditis 78												
Organic Diseases of the Heart 79	1					1					1	1
Acute Bronchitis 89	2											
Chronic Bronchitis 90												
Bronchopneumonia 91		2		1								
Pneumonia 92			1					1				2
Pulmonary Congestion, Pulmonary Apoplexy 94												
Asthma 96												
Other Diseases of the Stomach (cancer excepted) 103		1										
Diarrhœa and Enteritis (under 2 years) 104		4	1									
Diarrhœa and Enteritis (2 years and over) 105												
Intestinal Parasites 107			1									
Hernias, Intestinal Obstructions 109			1							1		
Cirrhosis of the Liver 113									1			
Bright's Disease 120												
Other Diseases of the Urethra, Urinary abscess, etc. 125		1										
Nonvenereal Diseases of the Male Genital Organs 127	1											
Other Accidents of Labor 136									1			
Puerperal Septichæmia 137								1				
Congenital Debility, Icterus, and Sclerema 151	3											
Senility 154												
Suicide by Poison 155								1				
Accidental Drowning 169											1	
Traumatism by Fall 172					1							
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.) 175									1		1	
Effects of Heat 179									2			
Cause of Death Not Specified or Ill-defined 189		2	1									

Total deaths, 99. Death-rate, 13.83.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
							1			1													1			
							1	3		4														4		
							2			2														2		
							1			1														1		
						1		1		1															1	
1							3	5		6				1				1					5	2	1	
		2		1			1	3		1				2				1					2		2	
							1							1									1			
1				1				2		2				1										2		
							1																	1		
		1					1			1														1		
1			1				3			3				1									2	1		
		1	1	1			1	2		2			1							1			1		1	
							1																1			
								1		1														1		
			1				2	1		3														3		
1		3	1				7	2		4				3			1	1					3	3	3	
							1	1		2															2		
		1					1			1													1				
			1				1	3		4															2	2	
		2			2		3	5		3				4	1				1				3	2	4	
		2						2		2													1		1	
1							1						1											1		
							1			1														1		
							4	1		5														5		
			1					1		1														1		
								1		1														1		
							2			1										1				1		
								1		1														1		
			1	2			3			1				1										2		1	
							1			1														1		
								1		1														1		
							1	2		3															3		
					1			1		1																1	
							1			1														1			
1							2			1										1			1	1		1
								1		1															1		
							2			1				1										1	1		
							2			2															1		
							1	2		3								1		1				1	1		

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TABLE 52.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN SOUTH ORANGE.		AGE PERIODS.										
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Measles	6	..	..	..	1	..	..	..	..	..	..
Scarlet Fever	7	..	..	..	1	..	..	..	..	..	..
Whooping Cough	8	..	..	1	..	..	..	..	..	..	..
Diphtheria and Croup	9	..	..	..	2	..	..	..	..	..	..
Influenza	10	..	1	..	..	..	..	..	..	..	..
Tuberculosis of the Lungs	28	..	..	..	..	..	1	..	2	2	..
Tuberculous Meningitis	30	1	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis	31	..	..	1	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Peritoneum, Intestines, Rectum.	41	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Female Genital Organs.	42	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Breast	43	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified.	45	..	..	..	..	..	..	..	1	..	..
Cerebral Hæmorrhage, Apoplexy	64	..	..	..	..	..	..	..	..	..	..
Acute Endocarditis	78	..	..	..	..	..	..	..	..	..	..
Organic Diseases of the Heart	79	..	..	..	..	..	..	..	..	..	..
Angina Pectoris	80	..	..	..	..	..	..	..	..	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	..	..	..	..	..	..
Acute Bronchitis	89	..	1	1	..	..	..	..	..	..	..
Chronic Bronchitis	90	..	..	..	..	..	..	..	..	..	..
Pneumonia	92	..	..	..	..	..	..	..	..	..	..
Pleurisy	93	..	..	2	..	..	..	..	..	..	..
Pulmonary Congestion, Pulmonary Apoplexy	94	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Stomach (cancer excepted)	103	..	1	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	1	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	..	..	..	..	..	..	..	..	..	..
Cirrhosis of the Liver	113	..	..	..	..	..	..	..	..	..	..
Acute Nephritis	119	..	..	..	..	..	..	..	..	1	..
Bright's Disease	132	..	..	..	..	..	..	1	..	..	..
Salpingitis and Other Diseases of the Female Genital Organs.	132	..	..	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	5	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..
Effects of Heat	179	..	..	..	..	..	..	..	..	..	..

Total deaths, 65. Death-rate, 10.43.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.								SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
									1			1															1		
									1			1															1		
									1			1															1		
										2		2															2		
									1			1															1		
	1			2					5	3		5	1		1					1						3	3	2	
									1			1															1		
									1			1															1		
						1				1							1											1	
					2					2		2															1	1	
			1							1		1															1		
		1								1		1															1		
							1		2								1							1			1		
		2	1		4				2	5		4	1			1								1		5		2	
				1						1		1															1		
			1			1			1	1		1			1												2		
						1			1						1												1		
				1			1		1	1		2												1			1		
									1	1	1	2															2		
				1						1		1					1										1		
					1			1	2			2															2		
						1			1	1		1															1		
							1		2			2															2		
					1					1		1															1		
							1			1		1															1		
	1								2			2															1		
										1		1															1		
	1									1		1															1		
1			2	1	2				3	4		5				2										3	1	3	
										1		1															1		
									4	1		5															5		
						1				1		1																1	
		1							1		1	1															1		

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TABLE 53.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN SUMMIT.		AGE PERIODS.										
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Scarlet Fever	7	..	..	..	1	..	..	..	..	..	..
Whooping Cough	8	..	..	1	..	..	..	..	..	..	..
Influenza	10	..	1	..	..	..	..	..	..	..	..
Tuberculosis of the Lungs	28	..	..	..	..	..	..	1	2	1	1
Acute Miliary Tuberculosis	29	..	..	..	..	..	..	1	..	..	..
Tuberculous Meningitis	30	..	..	3	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	..	1	..	..
Cancer and Other Malignant Tumors of the Skin	44	..	..	..	..	..	..	..	..	..	..
Acute Articular Rheumatism	47	..	..	..	..	1	..	..	..	..	..
Diabetes	50	..	..	..	..	..	..	..	..	..	..
Simple Meningitis	61	..	1	..	..	1	..	..	..	..	..
Including Cerebrospinal Fever	61A	..	..	..	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	..	..	..	..	..	..	..	..	..	..
Other Forms of Mental Alienation	68	..	..	..	..	..	..	..	..	..	..
Convulsions of Infants	71	..	..	1	..	..	..	..	..	..	..
Acute Endocarditis	78	..	..	..	..	..	..	..	..	..	..
Organic Diseases of the Heart	79	..	..	..	..	..	..	..	..	..	1
Angina Pectoris	80	..	..	..	..	..	..	..	..	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	..	..	..	..	..	..
Bronchopneumonia	91	1	..	..	..	..	..	..	..	..	..
Pneumonia	92	..	..	..	..	..	..	..	..	..	1
Pulmonary Congestion, Pulmonary Apoplexy	94	..	..	..	..	..	..	..	..	..	..
Ulcer of the Stomach	102	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Stomach (cancer excepted)	103	..	..	2	..	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	..	1	..	..	..	..	..	..	..	..
Appendicitis and Typhlitis	108	..	..	..	..	..	1	..	..	..	..
Hernias, Intestinal Obstructions	109	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Liver	115	1	..	..	..	..	..	..	..	..	..
Bright's Disease	120	..	..	..	..	..	..	..	..	..	..
Calculi of the Urinary Passages	123	..	..	..	..	..	..	..	..	..	..
Accidents of Pregnancy	134	..	..	..	..	..	..	..	..	1	..
Other Diseases of the Skin and Annexa	145	..	..	..	..	..	..	..	..	..	..
Diseases of the Bones (tuberculosis excepted)	143	..	..	..	..	1	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	3	..	..	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	2	..	..	..	..	..	..	..	..	..
Burns (conflagration excepted)	167	..	..	..	..	..	..	..	..	..	..
Absorption of Deleterious Gases (conflagration excepted	168	..	..	..	..	1	..	..	..	..	..
Traumatism by Fall	173	..	..	..	..	..	..	..	..	..	..
Traumatism by Other Crushing (vehicles, railroads, landslides, etc.)	175	..	..	..	..	..	..	..	..	..	..
Cause of Death not Specified or Ill-defined	189	..	1	..	..	..	..	..	..	..	..

Total deaths, 87. Death-rate, 11.40.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
									1			1																
									1			1															1	
									1			1															1	
2		1	3	1					5	7		9	1		1			1							2	2	1	
										1		1														1			
									2	1		3															3		
			1						1	1		2															1	1	
								1	1			1															1		
									1									1									1		
		1								1					1											1			
									2			2															2		
	1									1		1														1			
	1	1		1	3	1			5	2		5	1			1										5		2	
				1	1				1	1		2														1		1	
									1			1															1		
			1	2	2				2	3		4				1										3		2	
1				3	3				4	4		6			1	1										6	1	1	
					1					1		1																1	
					1					1						1												1	
				1	2				1	2		3					1		1							1	2	2	
1		1			1					2		2														2			
	1						1		1	1		1														1			
										1		3															2	1	
										1		1															1		
										1		1															1		
					1				1			1														1			
	2		1						2	1		2	1													3			
				1					1			1														1			
									1		1	1														1			
		1								1										1							1		
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									2			3															2		
									2			2															2		
				1					1			1																1	
			1						1			1		1													1		
1		1							2			2														2			
									1			1																	

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TABLE 54.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN TOWN OF UNION.	AGE PERIODS.												
	Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever 1	....	....	....	..	..	..	1	..	..	....	..	..
Whooping Cough 8	....	4	2	..	..	..	..	..	..	....	..	..
Diphtheria and Croup 9	....	....	5	1	..	..	..	..	..	....	..	1
Including Croup 9A	....	....	3	1	..	..	..	..	..	....	..	..
Erysipelas 18	....	....	....	..	..	..	..	..	..	....	..	1
Tuberculosis of the Lungs 28	....	....	....	1	..	3	7	1	1	10	3	1
Tuberculous Meningitis 30	....	....	1	1	..	..	..	..	..	....	..	..
Tuberculosis of Other Organs 34	....	....	....	..	..	..	..	..	..	....	..	..
Cancer and Other Malignant Tumors of the Buccal Cavity 39	....	....	....	..	..	..	..	..	..	....	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver 40	....	....	....	..	..	..	..	..	..	1	..	..
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum 41	....	....	....	..	..	..	..	..	..	....	..	..
Cancer and Other Malignant Tumors of the Female Genital Organs 42	....	....	....	..	..	..	..	..	..	....	..	..
Cancer and Other Malignant Tumors of the Breast 43	....	....	....	..	..	..	..	..	..	1	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified 45	....	....	....	..	..	..	..	..	..	....	..	..
Acute Articular Rheumatism 47	....	....	....	..	..	..	..	..	..	....	..	..
Diabetes 50	....	....	....	..	..	..	..	..	..	....	..	..
Simple Meningitis 61	....	....	....	1	..	..	..	1	..	....	..	..
Including Cerebrospinal Fever 61A	....	1	1	..	..	..	..	..	..	....	..	..
Cerebral Hæmorrhage, Apoplexy 64	....	....	....	..	..	..	..	..	1	....	..	1
Other Forms of Mental Alienation 68	....	....	....	..	..	..	..	..	..	....	..	..
Epilepsy 69	....	....	1	..	..	..	..	..	..	....	..	..
Convulsions of Infants 71	1	5	....	..	..	..	..	..	..	....	..	..
Other Diseases of the Eyes and Their Adnexa 75	....	....	1	..	..	..	..	..	..	....	..	..
Diseases of the Ears 76	....	....	....	1	..	..	..	..	..	....	..	..
Acute Endocarditis 78	....	....	....	..	..	..	..	..	..	....	..	..
Organic Diseases of the Heart 79	....	....	....	..	..	..	1	..	1	....	3	1
Angina Pectoris 80	....	....	....	..	..	..	..	..	..	1	..	..
Diseases of the Arteries, Atheroma, Aneurysm, etc. 81	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Larynx 87	....	....	1	..	..	..	..	..	..	....	..	..
Acute Bronchitis 89	1	....	1	..	..	..	..	..	..	....	..	..
Bronchopneumonia 91	1	3	5	1	..	..	..	..	..	....	1	..
Pneumonia 92	1	5	6	..	..	..	1	1	..	1	1	..
Pleurisy 93	....	....	....	..	..	..	..	..	..	....	..	..
Pulmonary Congestion, Pulmonary Apoplexy 94	....	....	....	..	1	..	..	..	..	....	..	..
Gangrene of the Lung 95	....	....	....	..	..	..	..	..	..	1	..	..
Asthma 96	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Pharynx 100	....	....	1	..	..	..	..	..	..	....	..	..
Ulcer of the Stomach 102	....	....	....	..	..	..	..	..	..	....	2	..
Other Diseases of the Stomach (cancer excepted) 103	....	1	....	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (under 2 years) 104	....	5	2	..	..	..	..	..	..	....	..	..
Diarrhœa and Enteritis (2 years and over) 105	....	....	1	1	..	..	..	..	..	....	1	1
Hernias, Intestinal Obstructions 109	....	....	....	..	..	..	1	..	..	....	..	..
Other Diseases of the Intestines 110	....	....	....	..	..	..	..	..	..	....	1	..
Cirrhosis of the Liver 113	....	....	....	..	..	..	..	..	..	2	1	..
Acute Nephritis 119	....	....	....	1	..	..	..	..	..	....	..	..
Bright's Disease 120	....	1	1	1	..	..	1	..	1	1	..	4
Diseases of the Bladder 124	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Prostate 126	....	....	....	..	..	..	..	..	..	....	..	..
Congenital Malformations (stillbirths not included) 150	1	....	....	..	..	..	..	..	..	....	..	..
Congenital Debility, Icterus, and Sclerema 151	4	1	....	..	..	..	..	..	..	....	..	..
Other Diseases Peculiar to Early Infancy 152	1	....	....	..	..	..	..	..	..	....	..	..
Senility 154	....	....	....	..	..	..	..	..	..	....	..	..

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	...	...	...	...	3	3	.....	6	...	...	...	...	...	...	...	...	...	...	...	...	.....	6	...	...
...	...	...	...	...	...	...	3	4	.....	7	...	...	...	...	...	...	...	...	...	...	...	...	.....	7	...	...
...	...	...	...	...	...	...	2	2	.....	4	...	...	...	...	...	...	...	...	...	...	...	...	.....	4	...	...
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1	1	1	...	...	...	...	22	3	.....	23	1	...	1	2	1	...	1	...	...	...	1	...	19	10	1	...
...	...	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	.....	2	...	...
...	...	...	1	...	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	1	...	...	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	.....	...	1	...
...	...	2	1	2	...	...	2	4	.....	1	1	...	3	...	1	...	...	...	...	...	...	...	3	...	3	...
1	1	1	...	...	...	...	3	...	.....	1	...	...	2	...	...	...	...	...	...	...	...	...	2	...	1	...
...	...	3	1	...	...	...	...	4	.....	...	1	...	3	...	...	...	...	...	...	...	...	...	3	...	1	...
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...	...	...	1	...	...	...	...	1	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	.....	...	1	...
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...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	.....	2	...	...
2	1	5	...	4	1	...	5	10	.....	2	1	1	8	1	1	...	...	...	...	...	1	...	5	...	10	...
...	...	1	...	...	...	...	1	...	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...
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...	...	...	...	...	...	...	2	4	.....	6	...	...	...	...	...	...	...	...	...	...	...	...	.....	6	...	...
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...	1	1	1	...	...	...	1	2	.....	...	1	...	2	...	...	...	...	...	...	...	...	...	1	...	2	...
...	2	2	3	...	...	...	6	6	.....	6	...	...	6	1	...	...	...	...	...	...	...	...	5	2	5	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	1	...	...	...	...	1	.....	...	...	...	...	...	...	...	...	...	...	...	1	...	.....	...	1	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	.....	2	...	...
...	1	3	2	2	1	...	10	15	.....	15	2	...	2	1	2	...	1	...	...	1	1	...	7	13	5	...
1	...	...	1	...	...	...	1	...	.....	1	...	...	1	...	...	...	...	...	...	...	...	...	2	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	...	...	...	...	...	1	.....	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...
...	...	...	1	...	...	...	...	1	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	.....	...	1	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	...	1	...	...	2	1	.....	2	...	...	...	1	...	...	...	...	...	...	...	...	2	...	1	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	...	...	...	...	1	6	.....	7	...	...	...	...	...	...	...	...	...	...	...	...	.....	7	...	...
...	...	...	3	...	...	...	4	3	.....	3	...	...	3	...	1	...	...	...	...	...	...	...	2	2	3	...
...	...	...	1	...	...	...	...	2	.....	...	...	...	1	...	1	...	...	...	...	...	...	...	1	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	1	...	...	...	...	3	1	.....	1	...	...	2	1	...	...	...	...	...	...	...	...	2	2	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
2	1	6	...	...	...	...	8	11	.....	8	...	...	9	2	...	...	...	...	...	...	...	...	11	5	3	...
1	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	1	...	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	...	...	...	...	4	1	.....	5	...	...	...	...	...	...	...	...	...	...	...	...	.....	5	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	.....	1	...	...
...	...	...	...	2	...	...	2	1	.....	...	...	...	3	...	...	...	...	...	...	...	...	...	.....	...	2	...

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TABLE 54— TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES

THE YEAR ENDING

DEATHS IN TOWN OF UNION.	AGE PERIODS.												
	Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Suicide by Poison 155	..	..	..	..	..	..	..	..	1	..	..	..
Suicide by Asphyxia 156	..	..	..	..	..	..	..	..	..	..	..	..
Suicide by Hanging or Strangulation 157	..	..	..	..	..	..	1	..	..	..	..	..
Suicide by Firearms 159	..	..	..	..	..	..	..	..	..	..	1	..
Other Acute Poisonings 165	..	..	..	..	..	..	..	..	..	..	..	..
Burns (conflagration excepted) 167	..	..	1	..	..	..	..	..	..	..	..	..
Traumatism by Fall 172	..	..	..	..	..	..	..	..	..	..	2	..
Effects of Heat 179	..	..	..	..	..	..	..	..	..	..	..	..
Cause of Death Not Specified or Ill-defined... 189	..	..	1	..	..	..	..	..	..	..	..	..

Total deaths, 233. Death-rate, 10.67.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
								1		1														1			
1								1					1											1			
								1			1														1		
								1					1											1			
				1				1					1											1			
		1	2					4		2	1		1	1	1										1	1	1
								1																	1		
			1					1		1			1												1	1	

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TABLE 55.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN TRENTON.		AGE PERIODS.											
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	
Typhoid Fever	1					5	6	5	11	3	2	
Measles	6		12	17	1							
Scarlet Fever	7			3	3							
Whooping Cough	8		17	8	1							
Diphtheria and Croup	9			17	7		1	1				
Including Croup	9A				1							
Dysentery	14		3									
Erysipelas	18	1							1			
Purulent Infection and Septicæmia	20		2									
Tetanus	24				1	1						
Tuberculosis of the Lungs	25		3	1	2	2	7	23	28	23	19	
Acute Miliary Tuberculosis	29			1				1	1		1	
Tuberculous Meningitis	30	1	5	6	2	1		1				
Abdominal Tuberculosis	31		1	1							3	
Tuberculosis of Other Organs	34	1		1			1		1	1		
Disseminated Tuberculosis	35								1			
Rickets	36		4									
Syphilis	37	4	1							1		
Cancer and Other Malignant Tumors of the Buccal Cavity	39											
Cancer and Other Malignant Tumors of the Stomach, Liver	40							1		2	2	
Cancer and Other Malignant Tumors of the Peritoneum, Intestines, Rectum.	41											
Cancer and Other Malignant Tumors of the Female Genital Organs.	42									1		
Cancer and Other Malignant Tumors of the Breast	43											
Cancer and Other Malignant Tumors of the Skin	44											
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified.	45							1			1	
Other Tumors (tumors of the female genital organs excepted).	46											
Acute Articular Rheumatism	47						1					
Diabetes	50				1							
Exophthalmic Goitre	51						1					
Leuchæmia	53					1						
Anæmia, Chlorosis	54						1					
Alcoholism (acute or chronic)	56							1		2	3	
Simple Meningitis	61	1	5	1	1	1		1				
Including Cerebrospinal Fever	61A	1	1	1								
Locomotor Ataxia	62											
Other Diseases of the Spinal Cord	63											
Cerebral Hæmorrhage, Apoplexy	64	1		2				1		1	5	
Softening of the Brain	65											
Paralysis Without Specified Cause	66									2	2	
Other Forms of Mental Alienation	68									1		
Epilepsy	69	1					1					
Convulsions of Infants	71	11	5	1								
Chorea	72					1						
Neuralgia and Neuritis	73									1		
Other Diseases of the Nervous System	74										1	
Other Diseases of the Eyes and Their Adnexa	75	1										
Diseases of the Ears	76		1	1								
Pericarditis	77						1					
Acute Endocarditis	78				2	1	1	1	3		3	
Organic Diseases of the Heart	79	3	2		1	2	3	6		5	10	
Angina Pectoris	80									1		

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
4	3	4	1	8	...	...	...	...	27	20	2	32	1	..	2	..	5	..	6	..	1	..	..	..	20	20	1	...
..	..	..	...	...	...	...	...	...	11	10	.....	20	..	..	..	..	..	..	..	..	..	..	..	..	....	30	...	...
..	..	..	...	...	...	...	...	...	3	3	.....	6	..	..	..	..	..	..	..	..	..	..	..	..	....	6	...	...
..	..	..	...	...	...	...	...	...	13	13	.....	20	..	..	..	..	..	..	..	..	..	..	..	..	....	20	...	...
..	..	..	...	...	...	...	...	...	12	14	.....	24	..	..	..	..	..	..	..	..	1	..	..	1	....	26	...	...
..	..	..	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	1	...	1	...	...	...	...	3	2	.....	5	..	..	..	..	..	..	..	..	..	..	..	..	....	5	...	...
..	..	..	1	...	...	...	...	...	3	...	.....	2	..	..	..	..	1	..	..	..	..	..	..	..	1	2	...	..
..	..	..	1	...	...	...	...	...	2	1	.....	2	..	..	..	1	..	..	..	..	..	..	..	..	1	2	...	...
..	..	..	...	...	...	...	...	...	2	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	1	....	2	...	...
22	12	10	10	14	8	...	...	...	116	69	16	121	11	..	6	10	5	2	12	..	9	..	3	6	80	68	28	8
..	..	..	...	...	...	...	...	...	3	1	2	4	..	..	..	..	..	..	..	..	..	..	..	..	2	2	...	...
..	..	..	...	...	...	...	...	...	5	11	1	15	1	..	..	..	..	..	..	..	..	..	..	..	....	16	...	...
..	..	2	..	1	...	...	...	...	5	3	2	4	..	..	..	1	..	..	..	..	1	..	1	1	3	4	1	...
..	..	..	...	...	...	...	...	...	4	1	.....	4	..	..	..	..	..	..	..	..	..	..	..	1	....	5	...	...
1	..	..	...	...	...	...	...	...	2	...	1	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
..	..	..	...	...	...	...	...	...	3	1	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	....	4	...	...
..	..	..	...	...	...	...	...	...	4	2	.....	6	..	..	..	..	..	..	..	..	..	..	..	..	....	6	...	...
..	..	..	2	1	1	...	...	...	3	1	.....	2	..	..	..	1	..	..	1	..	..	..	..	..	..	2	1	1	...
1	..	2	9	8	4	...	...	...	14	15	2	17	..	..	3	3	2	..	2	..	1	..	..	1	16	5	7	1
..	2	..	2	5	2	...	...	...	8	8	.....	7	1	..	3	..	..	..	..	..	..	..	..	..	8	2	1	...
1	3	3	1	3	2	1	..	...	15		2	8	1	..	5	..	..	..	1	..	..	..	..	..	11	....	4	...
2	1	..	3	...	...	...	...	...	6	.....	.....	6	..	..	..	..	..	..	..	..	..	..	..	..	5	1	...	...
..	..	..	2	...	...	1	...	...	2	1	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	1	....	2	...
..	..	..	1	1	1	...	...	...	1	4	.....	2	1	..	1	1	..	..	..	..	..	..	..	..	1	2	2	...
..	..	1	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	...
..	1	..	...	...	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...
..	..	..	2	3	2	...	...	...	3	5	.....	5	1	..	..	1	..	..	..	..	..	..	..	1	4	1	3	...
..	..	..	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	..	...	...	...	...	...	...	1	...	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	1	...	1	...	...	...	...	2	1	1	2	1	..	..	..	..	..	..	..	..	..	..	..	2	1	...	...
..	2	1	2	2	...	...	...	...	11	2	.....	10	1	..	..	..	..	..	..	..	..	..	..	1	7	4	1	1
..	..	..	...	1	2	...	...	...	6	7	.....	9	1	..	..	2	1	..	..	..	..	..	..	..	1	10	2	...
1	..	..	...	...	...	...	...	...	2	2	.....	3	..	..	..	..	1	..	..	..	..	..	..	..	....	3	...	1
..	..	..	...	1	1	...	...	...	2	...	.....	....	1	..	1	..	..	..	..	..	..	..	..	..	2	....	..	
1	..	..	...	...	...	...	...	...	1	...	.....	....	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...	...
3	6	5	18	24	10	7	...	...	37	52	3	50	8	..	9	10	..	1	..	..	..	..	1	1	42	13	32	2
..	..	..	1	2	1	...	...	...	...	4	.....	3	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	...
3	3	4	1	4	3	2	1	..	15	10	2	16	3	..	2	1	1	..	..	..	1	..	1	..	12	5	8	...
2	4	1	2	2	1	3	...	...	12	4	3	10	2	..	..	2	..	..	1	..	..	..	..	1	9	3	4	...
..	..	..	2	...	1	...	...	...	5	...	.....	5	..	..	..	..	..	..	..	..	..	..	..	..	....	4	1	...
..	..	..	...	...	...	...	...	...	10	7	.....	17	..	..	..	..	..	..	..	..	..	..	..	..	....	17	...	...
..	..	..	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	1	..	...	...	...	...	...	...	...	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
1	..	..	...	...	...	...	...	...	1	1	.....	1	1	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
..	..	..	...	...	...	...	...	...	...	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
..	..	..	...	...	...	...	...	...	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	...	...
..	1	..	...	1	...	...	...	...	2	1	.....	2	..	..	..	1	..	..	..	..	..	..	..	..	1	2	...	...
2	2	1	3	8	7	1	...	...	15	20	.....	20	1	..	4	7	..	..	2	..	..	..	..	1	12	11	12	...
6	8	13	11	33	32	8	...	...	72	71	3	83	7	..	18	12	5	4	4	..	3	..	2	5	68	35	37	3
1	..	..	...	3	...	...	...	...	3	2	.....	4	..	..	..	1	..	..	..	..	..	..	..	..	4	....	1	...

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TABLE 55.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN TRENTON.		AGE PERIODS.										
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	..	..	..	..	..	..
Embolism and Thrombosis	82	..	1	..	..	..	..	1	..	..	..
Diseases of the Lymphatic System (lymphangitis, etc.)	84	..	1	..	..	..	..	..	..	..	..
Diseases of the Larynx	87	1	2	1	1	..	..	..	..	..	..
Diseases of the Thyreoid Body	88	..	..	..	1	..	..	2	..	..	..
Acute Bronchitis	89	..	3	1	..	..	..	..	..	1	..
Chronic Bronchitis	90	..	..	..	..	..	..	..	..	..	..
Bronchopneumonia	91	6	32	20	2	..	1	..	1	2	2
Pneumonia	92	9	30	10	2	1	2	3	5	1	4
Pleurisy	93	..	..	1	..	..	..	1	1	..	2
Pulmonary Congestion, Pulmonary Apoplexy	94	1	2	1	1	1	..	1	..	..	2
Gangrene of the Lung	95	..	..	..	..	..	..	..	..	..	1
Asthma	96	..	..	..	..	..	..	..	..	..	..
Pulmonary Emphysema	97	..	..	..	..	..	1	..	..	..	..
Other Diseases of the Respiratory System (tuberculosis excepted).	98	..	..	..	..	..	..	..	..	..	..
Diseases of the Pharynx	100	..	1	..	1	..	..	..	..	..	..
Ulcer of the Stomach	102	..	..	..	..	..	..	..	..	..	2
Other Diseases of the Stomach (cancer excepted)	103	1	8	1	..	..	..	..	..	..	..
Diarrhœa and Enteritis [under 2 years)	104	6	101	15	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	..	..	6	..	..	..	1	..	..	..
Appendicitis and Typhlitis	108	..	..	..	..	..	1	..	1	1	1
Hernias, Intestinal Obstructions	109	..	1	..	2	..	..	..	..	..	1
Other Diseases of the Intestines	110	..	..	..	..	..	..	..	1	..	..
Cirrhosis of the Liver	113	..	1	..	..	..	..	..	..	1	1
Other Diseases of the Liver	115	1	3	1	..	..	1	..	..	..	..
Simple Peritonitis (nonpuerperal)	117	..	..	1	..	..	1	..	..	..	..
Acute Nephritis	119	..	..	..	..	..	..	1	..	..	..
Bright's Diseases	120	1	3	2	2	..	1	1	6	2	5
Chyluria	121	..	..	..	..	..	..	..	..	..	1
Other Diseases of the Kidneys and Annexa	122	..	..	..	..	..	..	..	1	..	1
Calculi of the Urinary Passages	123	..	..	..	..	..	..	..	..	..	..
Diseases of the Bladder	124	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Urethra, Urinary Abscess, etc.	125	..	..	..	..	..	..	..	..	..	..
Diseases of the Prostate	126	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Uterus	130	..	..	..	..	..	..	..	1	..	..
Salpingitis and Other Diseases of the Female Genital Organs.	132	..	..	..	..	..	1	1	2	..	1
Accidents of Pregnancy	134	..	..	..	..	..	..	1	1	1	..
Puerperal Hæmorrhage	135	..	..	..	..	..	..	1	2	..	1
Puerperal Septichæmia	137	..	..	..	..	..	..	5	3	1	3
Gangrene	142	..	..	..	..	..	..	..	..	..	..
Acute Abscess	144	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Skin and Annexa	145	..	..	1	..	..	..	..	..	..	..
Diseases of the Bones (tuberculosis excepted)	146	..	1	..	..	..	..	..	1	..	..
Congenital Malformations (stillbirths not included	150	2	1	..	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerema	151	83	5	1	..	..	..	..	..	..	..
Other Diseases Peculiar to Early Infancy	152	5	2	..	..	..	..	..	..	..	..
Lack of Care	153	1	..	..	..	..	..	..	..	..	..
Senility	154	..	..	..	..	..	..	..	..	..	..
Suicide by Poison	155	..	..	..	..	..	..	..	2	..	..
Suicide by Hanging or Strangulation	157	..	..	..	..	..	..	..	..	..	..
Suicide by Firearms	159	..	..	..	..	..	..	..	1	..	..
Suicide by Cutting or Piercing Instruments	160	..	..	..	..	..	..	..	..	..	..
Other Acute Poisonings	165	..	..	1	..	..	..	1	..	..	..

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued*

AGE PERIODS.									SEX.		COLOR	NATIVITY.												SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	..	3	12	15	17	1	..	22	26	1	34	2	..	3	6	..	..	3	..	..	..	..	..	10	5	24	...
..	..	..	..	..	..	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	...
1	..	1	..	..	..	..	..	..	2	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	1	....	3	...	...
..	1	..	1	..	..	1	..	..	4	4	1	3	..	..	..	..	..	..	..	..	..	..	..	..	2	6	...	...
..	..	..	..	..	..	..	..	..	1	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	1	....	3	...	...
..	..	..	..	..	3	..	..	..	4	4	1	7	..	..	1	..	..	..	..	..	..	..	..	..	1	4	3	...
..	..	..	..	1	..	..	1	..	..	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	..	2	...
1	1	2	1	4	5	3	..	..	49	34	3	68	1	..	1	4	2	1	2	..	..	..	1	3	11	65	7	...
8	8	9	8	17	12	5	1	..	85	65	2	105	5	..	10	10	4	1	2	..	7	1	2	3	44	83	21	2
1	..	..	..	..	3	..	1	..	5	5	.....	8	..	..	..	2	..	..	..	..	..	..	..	..	6	2	2	...
2	..	1	1	1	..	2	..	..	9	6	.....	13	..	..	..	1	1	..	..	..	..	..	..	..	5	9	1	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
1	..	..	1	3	..	..	..	..	5	..	.....	1	1	..	2	1	..	..	..	..	..	..	..	..	4	....	1	...
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
1	..	1	..	..	1	..	..	..	2	1	.....	1	1	..	..	..	..	..	1	..	..	..	..	..	3	....	...	...
..	..	..	..	1	..	..	..	..	3	..	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	....	3	...	...
1	..	1	2	2	..	..	..	..	7	1	1	..	..	..	..	..	..	..	1	..	..	..	..	1	7	....	1	..
1	..	..	..	3	2	..	..	..	4	12	.....	13	..	..	2	1	..	..	..	..	..	..	..	..	2	11	3	...
..	..	..	..	..	..	..	..	..	59	63	1	122	..	..	..	..	..	..	..	..	..	..	..	..	....	122	...	...
3	..	1	..	2	..	2	..	..	5	10	1	12	1	..	1	1	..	..	..	..	..	..	..	..	6	3	1	...
1	1	1	..	1	1	..	..	..	7	2	.....	3	..	..	..	2	1	..	1	..	1	..	1	..	4	5	...	...
1	3	1	1	..	1	..	..	..	5	6	1	6	2	..	..	1	1	..	..	..	..	..	..	1	3	4	3	1
1	..	..	..	..	1	..	..	..	2	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	1	2	....	..	1
2	2	1	..	1	2	1	..	..	7	5	.....	3	1	..	1	1	..	..	1	..	..	..	..	..	9	2	1	...
..	..	..	1	1	2	..	..	..	3	7	.....	7	..	..	..	2	..	1	..	..	..	..	..	..	1	6	3	...
..	..	..	..	1	1	..	..	..	2	2	.....	3	..	..	..	..	1	..	..	..	..	..	..	..	1	2	1	...
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	..	...
9	8	15	15	19	24	12	..	..	63	62	4	77	13	..	10	11	3	2	3	1	3	..	2	..	64	28	33	...
..	..	..	..	..	..	..	..	..	..	1	.....	..	..	..	..	..	..	..	1	..	..	..	..	..	1	....	..	...
..	1	1	..	..	..	1	..	..	3	2	.....	5	..	..	..	..	..	..	..	..	..	..	..	..	2	2	1	...
..	..	..	..	1	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	..	...
..	..	..	..	1	2	..	..	..	2	1	.....	2	..	..	1	..	..	..	..	..	..	..	..	..	2	....	1	...
..	..	..	..	1	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	..	...
..	..	..	..	1	..	3	..	..	4	..	.....	3	..	..	1	..	..	..	..	..	..	..	..	..	1	1	2	...
1	..	..	..	..	..	..	..	..	..	2	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	1	1	....	...
..	1	..	..	..	..	..	..	..	..	6	.....	5	..	..	..	..	..	1	..	..	..	..	..	..	4	2	....	...
..	..	..	..	..	..	..	..	..	..	3	.....	1	1	..	..	..	..	..	..	..	..	..	1	..	3	....	....	...
..	..	..	..	..	..	..	..	..	..	4	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	4	....	....	...
1	..	..	..	..	..	..	..	..	..	13	.....	5	..	..	..	..	1	1	5	..	1	..	..	..	13	....	....	...
..	..	..	1	..	..	..	1	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...
..	..	..	..	..	1	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	....	...
1	1	..	1	..	1	..	..	..	..	5	.....	4	..	..	..	..	1	..	..	..	..	..	..	..	2	2	1	...
..	1	..	..	..	..	..	..	..	2	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	1	....	3	....	...
..	..	..	..	..	..	..	..	..	2	..	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	....	3	....	...
..	..	..	..	..	..	..	..	..	52	37	2	89	..	..	..	..	..	..	..	..	..	..	..	..	....	89	....	...
..	..	..	..	..	..	..	..	..	3	4	.....	7	..	..	..	..	..	..	..	..	..	..	..	..	....	7	....	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	....	...
..	..	..	..	..	4	2	..	..	6	..	.....	4	..	..	2	..	..	..	..	..	..	..	..	..	1	....	5	...
..	1	2	..	..	..	..	..	..	3	2	.....	2	1	..	..	2	..	..	..	..	..	..	..	..	4	....	1	...
2	..	1	..	..	..	..	..	..	2	1	.....	2	..	..	..	..	..	..	1	..	..	..	..	..	....	2	1	...
1	..	..	..	..	..	..	..	..	2	..	.....	..	..	..	1	..	..	..	..	..	..	..	1	..	1	1	....	...
1	..	..	..	..	..	..	..	..	1	..	.....	..	1	..	..	..	..	..	..	..	..	..	..	..	1	....	....	...
..	..	..	..	..	..	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	....	2	....	...

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TABLE 55.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN TRENTON.		AGE PERIODS.										
		Under one month.	Under 1 yr. "not including under 1 mo."	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Conflagration	166	....	....	....	..	..	..	..	..	..	..
Burns (conflagration excepted)	167	....	1	5	4	..	..	1	..	..	..
Accidental Drowning	169	....	....	....	3	..	2	1	1	..	1
Traumatism by Firearms	170	....	....	1	1	..	..	..	..	..	..
Traumatism by Fall	172	....	....	1	1	1	1	..	1	1	3
Traumatism by Machines	174	....	....	....	..	..	..	..	..	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	....	1	3	4	..	..	1	4	4	3
Injuries by Animals	176	....	....	....	..	..	..	..	..	..	..
Effects of Heat	179	....	1	....	..	..	..	..	1	..	1
Electricity (lightning excepted)	181	....	....	....	..	..	..	1	..	..	..
Homicide by Firearms	182	....	....	....	..	..	..	..	1	..	..
Homicide by Other Means	184	....	....	....	..	..	..	..	..	1	..
Other External Violence	186	....	....	....	..	..	..	1	1	2	..
Cause of Death not Specified or Ill-defined	189	4	27	1	..	..	..	..	..	..	..

Total deaths, 1,842. Death-rate, 18.54.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued.*

AGE PERIODS.									SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
1	1	...	...	...	...	...	...	...	2	...	.....	... 1	..	..	..	..	..	..	..	1	..	..	....	2	...	...
..	..	...	...	...	...	...	...	...	6	5	.....	10 ..	..	..	..	..	..	..	..	..	..	1	..	1	10	...	...
3	..	...	1	3	...	...	...	...	15	...	1	7 ..	..	1	..	1	..	1	..	1	..	..	4	5	6	...	4
.	..	...	...	...	...	...	...	...	2	...	.....	2 ..	..	..	..	..	..	..	..	..	..	..	..	....	2	...	...
4	..	....	1	5	3	2	...	...	15	9	.....	11 ..	..	3	4	..	..	4	..	1	..	1	..	6	10	7	1
..	1	...	...	...	...	...	...	...	...	1	.....	1 ..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	...
1	2	1	1	3	...	...	...	...	25	3	.....	19 ..	..	..	1	4	..	1	1	..	..	..	2	16	9	1	2
..	..	...	...	1	...	...	...	...	1	...	.....	1 ..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	...
1	..	1	1	2	2	1	...	...	8	3	.....	5 2	..	1	1	..	..	1	..	..	..	..	1	5	3	3	...
.	..	...	...	...	...	...	...	...	1	...	.....	1 ..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	...
2	..	...	...	...	...	...	...	...	1	2	.....	.....	..	..	..	3	..	..	..	..	..	..	..	3	....	...	...
.	..	1	...	...	...	...	...	...	2	...	.....	.....	..	..	..	1	..	..	..	..	..	..	1	1	....	...	1
.	..	...	...	...	...	...	...	...	4	...	2	1 ..	..	1	..	..	..	..	..	..	..	..	2	....	3	1	...
.	..	...	...	...	...	...	...	...	17	15	.....	32 ..	..	..	..	..	..	..	..	..	..	..	..	....	32	...	...

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TABLE 56.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES

THE YEAR ENDING

DEATHS IN VINELAND.		AGE PERIODS.												
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Measles	6		1	1									
Influenza	10												
Tetanus	24												
Tuberculosis of the Lungs	28						1	1			1	1	
Tuberculous Meningitis	30				1						1		
Cancer and Other Malignant Tumors of the Stomach, Liver	40												
Cancer and Other Malignant Tumors of the Female Genital Organs	42											1	1
Cancer and Other Malignant Tumors of the Breast	43												
Cancer and Other Malignant Tumors of the Skin	44												
Diabetes	50												
Cerebral Hæmorrhage, Apoplexy	64												
Paralysis Without Specified Cause	66												
Organic Diseases of the Heart	79	1										1	1
Angina Pectoris	80											1	
Embolism and Thrombosis	82												
Pneumonia	92		1		1			1					
Asthama	96												
Other Diseases of the Stomach (cancer excepted)	103	1	4										
Diarrhœa and Enteritis (under 2 years)	104	1	3	2									
Diarrhœa and Enteritis (2 years and over)	105					1							
Appendicitis and Typhlitis	108												
Hernias, Intestinal Obstructions	109												
Cirrhosis of the Liver	113												
Other Diseases of the Liver	115												
Acute Nephritis	119											1	
Bright's Disease	120	1									1		
Salpingitis and Other Diseases of the Female Genital Organs	132							1					
Accidents of Pregnancy	134										1		
Puerperal Septichæmia	137											1	
Other Diseases of the Skin and Annexa	145												
Congenital Malformations (stillbirths not included)	150		1										
Congenital Debility, Icterus, and Sclerema	151	2											
Other Diseases Peculiar to Early Infancy	152	1											
Senility	154												
Burns (conflagration excepted)	167			4									
Absorption of Deleterious Gases (conflagration excepted)	168												1
Traumatism by Fall	172			1									
Cause of Death Not Specified or Ill-defined	199		1										

Total deaths, 106. Death-rate, 19.56.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.													SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
								2			2															2		
		1						1							1												1	
	1	1						1	1		1	1												1	1	1		
	1		2					4	3		4					3									4	3	1	
								2			1											1			1	1		
1		2	2	2				2	5		2	2				1						1	1		2	1	4	
								2			1					1									1		1	
		1						1						1											1			
				1				1			1																1	
1			1					2			1	1															2	
2	1	2	4				5	4			9														4	1	4	
			1					1			1														1			
	1	5	2	5			10	6		2	13	1				1					1				10	1	5	
			1					1			1															1		
			1					1			1															1		
	1		1	1			1	5			5					1									3	2	1	
			1					1			1															1		
			1	1				2			7														2	5		
								4	2		6															6		
			1					1	1		1															1		
								1			1															1		
		1	1	1				2	1		2				1										2		1	
		1						1			1														1			
			1					1	1		1																1	
								1			1															1		
1		1	2	1				5	4		5					1					1				3	2	2	
								1	1		1															1		
									1		1															1		
								1	1		1															1		
			1					1	1		1															1		
								2			2																2	
								1			1																1	
						1			1		1															1		
								2	2		4																4	
								1			1															1		
								1			1																1	
								1	1		1																1	

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TABLE 57.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN WESTFIELD.		AGE PERIODS.									
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Measles	6	....	....	1	..	..	..	..	..	..	..
Tuberculosis of the Lungs	28	....	....	....	..	..	..	1	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	....	....	....	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Breast	43	....	....	....	..	..	..	..	..	..	..
Acute Articular Rheumatism	47	....	....	....	..	..	..	..	..	..	..
Diabetes	50	....	....	1	..	..	..	..	..	..	..
Leuchæmia	53	....	....	....	..	..	..	..	..	..	..
Simple Meningitis	61	....	....	1	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	....	....	....	..	..	..	..	..	..	..
Acute Endocarditis	78	....	....	....	..	..	..	..	1	..	..
Organic Diseases of the Heart	79	....	....	....	..	..	..	..	..	..	1
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	....	....	....	..	..	..	..	..	..	..
Diseases of the Nasal Fossæ	86	....	....	....	..	..	..	..	..	..	..
Acute Bronchitis	89	....	....	....	..	..	..	..	..	..	..
Bronchopneumonia	91	....	2	1	..	..	..	..	..	..	..
Pneumonia	92	....	1	1	..	..	..	..	..	..	..
Pleurisy	93	....	....	....	..	..	..	..	..	..	..
Pulmonary Congestion, Pulmonary Apoplexy	94	....	....	....	..	..	..	..	..	..	..
Other Diseases of the Stomach (cancer excepted)	103	....	1	....	..	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	....	3	1	..	..	..	..	..	..	..
Hernias, Intestinal Obstructions	109	....	....	....	..	..	..	..	..	..	..
Bright's Disease	120	....	....	....	..	..	..	1	..	..	..
Gangrene	142	....	....	....	..	..	..	..	..	..	..
Congenital Debility, Icterus, and Sclerœma	151	1	....	....	..	..	..	..	..	..	..
Absorption of Deleterious Gases (conflagration excepted)	168	....	....	....	..	..	..	..	..	..	..
Traumatism by Fall	172	....	....	....	..	..	..	..	..	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	....	....	....	..	..	..	1	..	1	..

Total deaths, 70. Death-rate, 10.52.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
1	..	..	1	..	1	..	..	..	2	2	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	..
..	..	1	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	1	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	..	..	1	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	1	..	..	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..
..	1	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
..	..	2	1	2	4	..	..	..	5	4	2	8	..	..	1	..	..	..	..	..	..	..	..	..	..	4	1	4	..
..	..	..	..	4	1	3	..	..	6	3	.....	8	..	..	1	..	..	..	..	..	..	..	..	..	..	6	..	3	..
..	..	..	..	..	3	..	..	..	2	2	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1	..
..	..	1	..	..	..	..	..	..	..	1	.....	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..
..	..	..	..	..	..	..	1	..	1	..	.....	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	1	..	..	..	..	..	1	.....	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	3	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..
..	..	..	..	..	..	1	1	..	1	3	2	3	..	..	..	1	..	..	..	..	..	..	..	..	..	1	2	1	..
..	..	..	..	1	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	1	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	..	..	..	..	..	2	2	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..
..	..	1	..	1	..	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
..	..	1	..	..	1	1	..	..	3	1	.....	2	..	..	1	..	1	..	..	..	..	..	..	..	..	2	1	1	..
..	..	..	..	..	1	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	..	..	..	..	..	4	3	.....	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	..
..	..	..	..	1	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	..	1	1	..	..	..	1	1	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..
..	..	..	..	..	..	..	..	..	2	..	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	..	..

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TABLE 58.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES,

THE YEAR ENDING

DEATHS IN WEST HOBOKEN.		AGE PERIODS.												
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1	..	..	1	..	1	1	..	..	..	..	..	..
Measles	6	..	..	2	..	..	..	..	..	..	..	..	..
Scarlet Fever	7	..	1	4	..	..	2	..	..	..	..	..	..
Whooping Cough	8	..	4	4	..	..	..	..	..	..	..	..	..
Diphtheria and Croup	9	..	1	2	3	1	..	..	..	..	..	..	..
Including Croup	9A	..	..	4	1	..	..	..	..	..	..	..	..
Dysentery	14	..	1	..	..	..	..	..	..	..	..	..	..
Erysipelas	18	..	2	..	..	..	..	..	..	..	..	..	..
Tuberculosis of the Lungs	28	..	1	1	..	..	2	12	5	6	6	5	1
Tuberculous Meningitis	30	..	1	1	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis	31	..	..	..	..	..	..	..	..	..	..	1	..
Syphilis	37	..	1	..	..	..	..	..	..	..	..	..	1
Cancer and Other Malignant Tumors of the Buccal Cavity	39	..	..	..	..	..	..	1	..	..	..	..	..
Cancer and Other Malignant Tumors of the Stomach, Liver	40	..	..	..	..	..	..	..	..	..	..	..	1
Cancer and Other Malignant Tumors of the Peritonæum, Intestines, Rectum	41	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of the Female Genital Organs	42	..	..	..	..	..	..	..	..	..	..	..	2
Cancer and Other Malignant Tumors of the Breast	43	..	..	..	..	..	..	..	..	..	..	1	..
Cancer and Other Malignant Tumors of the Skin	44	..	..	..	..	..	..	..	..	..	..	..	..
Cancer and Other Malignant Tumors of Other Organs or of Organs not Specified	45	..	..	..	..	..	..	..	..	..	..	..	1
Acute Articular Rheumatism	47	..	..	1	..	..	..	..	..	1	..	..	..
Diabetes	50	..	..	..	..	..	..	..	1	..	..	..	1
Leuchæmia	53	..	..	..	..	..	..	..	..	..	..	..	..
Anæmia, Chlorosis	54	..	1	..	..	..	..	..	..	..	..	..	..
Simple Meningitis	61	..	3	4	1	..	..	..	..	..	..	..	..
Including Cerebrospinal Fever	61A	1	..	3	1	..	..	..	..	..	..	..	..
Locomotor Ataxia	62	..	..	..	..	..	..	..	..	..	..	..	1
Other Diseases of the Spinal Cord	63	..	..	2	..	..	..	..	..	..	..	..	..
Cerebral Hæmorrhage, Apoplexy	64	..	..	1	..	..	..	..	..	..	..	2	..
Paralysis Without Specified Cause	66	..	..	..	1	..	..	..	..	..	..	..	..
Convulsions of Infants	71	2	2	1	..	..	..	..	..	..	..	..	..
Acute Endocarditis	78	..	..	..	1	..	..	..	1	..	..	1	1
Organic Diseases of the Heart	79	..	..	..	..	..	1	..	..	1	1	2	1
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81	..	..	..	..	..	..	..	..	..	1	..	..
Diseases of the Larynx	87	..	..	..	1	..	..	..	..	..	..	..	..
Acute Bronchitis	89	..	5	..	..	..	..	..	..	..	..	..	..
Chronic Bronchitis	90	..	..	..	..	..	..	..	..	..	..	..	1
Bronchopneumonia	91	..	6	4	2	..	..	..	..	..	..	..	..
Pneumonia	92	3	3	6	2	..	..	2	1	..	1	3	..
Pulmonary Congestion, Pulmonary Apoplexy	94	..	..	..	..	..	..	..	1	..	..	1	1
Asthma	96	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases of the Respiratory System (tuberculosis excepted)	98	..	..	1	..	..	..	..	..	..	..	..	..
Diseases of the Pharynx	100	..	..	..	1	..	..	..	..	..	..	..	..
Ulcer of the Stomach	102	..	..	..	..	..	..	..	..	..	..	..	1
Other Diseases of the Stomach (cancer excepted)	103	..	2	1	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (under 2 years)	104	4	16	2	..	..	..	..	..	..	..	..	..
Diarrhœa and Enteritis (2 years and over)	105	..	..	3	..	..	..	..	..	..	2	..	..
Hernias, Intestinal Obstructions	109	..	1	1	..	..	..	..	..	..	..	..	..
Cirrhosis of the Liver	113	..	..	..	..	..	..	..	..	..	..	1	1
Acute Nephritis	119	..	..	..	..	..	..	..	..	..	..	..	..
Bright's Disease	120	..	1	1	..	..	..	1	1	4	5	1	4

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.							SEX.		COLOR.	NATIVITY.												SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	...	3	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
...	...	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	...	...	...	...	1	6	.....	6	...	...	...	...	...	...	1	...	...	...	...	...	...	7	...	...
...	...	...	...	...	...	...	6	2	.....	8	...	...	...	...	...	...	...	...	...	...	...	...	...	8	...	...
...	...	...	...	...	...	...	2	5	.....	7	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...
...	...	...	...	...	...	...	3	2	.....	4	...	...	1	...	...	...	...	...	...	...	...	...	...	5	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	1	...	...	...	...	...	3	.....	3	...	...	...	...	1	...	...	...	...	...	...	...	...	2	1	...
2	5	1	1	...	...	...	25	23	.....	25	1	1	10	1	4	...	...	...	...	...	...	6	...	26	19	3
...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
...	...	1	...	...	...	...	1	1	.....	1	...	...	1	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	...	...	...	...	...	2	.....	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...
...	...	1	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
1	3	3	1	...	...	...	3	6	.....	3	...	1	2	2	...	...	...	...	...	...	...	1	...	6	1	2
1	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	1	...	...	...	...	1	2	.....	2	...	...	1	...	...	...	...	...	...	...	...	...	...	2	...	1
...	...	...	...	...	...	...	...	1	.....	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...
1	...	...	...	...	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	1	.....	1	1	...	5	...	...	...	...	...	...	...	...	...	...	...	2	...
1	...	2	1	...	...	...	3	3	.....	1	...	...	5	...	...	...	...	...	...	...	...	...	...	5	...	1
...	...	1	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	4	4	.....	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8	...
...	...	...	...	...	...	...	4	1	.....	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	...
...	...	...	...	...	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
1	3	3	4	5	...	...	9	10	.....	3	...	3	4	4	1	2	1	...	...	...	...	1	1	12	3	4
...	...	1	...	...	...	...	1	1	.....	1	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1	...
...	...	...	...	...	...	...	3	2	.....	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	...
...	2	3	1	1	...	...	6	5	.....	5	...	1	1	1	2	...	...	...	...	...	...	1	...	7	1	3
1	1	3	5	2	...	...	14	9	.....	9	1	1	7	1	1	...	1	...	...	...	...	2	...	12	2	9
...	...	...	...	1	...	...	...	2	.....	1	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1
...	...	...	...	...	...	...	...	1	.....	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...
...	...	...	2	1	...	...	4	4	.....	5	1	1	1	...	...	...	...	...	...	...	...	...	...	...	5	3
...	...	1	1	...	...	...	1	2	.....	...	...	1	1	...	...	1	...	...	...	...	...	...	...	1	...	2
1	...	2	1	2	...	...	7	11	.....	14	1	...	2	1	...	...	...	...	...	...	...	...	...	1	12	5
1	1	3	3	1	...	...	10	20	.....	16	...	2	5	1	3	1	1	...	...	...	...	1	...	5	17	8
...	2	2	...	...	1	...	1	7	.....	4	...	2	2	...	...	...	...	...	...	...	...	...	...	2	1	5
...	...	1	...	...	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	1	...	...	1	...	...	3	2	.....	3	...	...	1	...	1	...	...	...	...	...	...	1	...	1	3	1
...	...	...	...	...	...	...	16	6	.....	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22	...
...	...	1	2	...	...	...	5	3	.....	6	...	...	2	...	...	...	...	...	...	...	...	...	...	2	5	1
...	...	2	1	...	...	...	1	4	.....	2	1	...	2	...	...	...	...	...	...	...	...	...	...	1	2	2
2	...	1	1	...	...	...	3	3	.....	1	...	...	3	...	2	...	...	...	...	...	...	...	...	4	...	2
...	...	1	...	...	...	...	...	1	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...
5	2	5	6	1	...	...	20	17	.....	18	1	1	7	5	3	1	...	...	...	...	...	1	...	21	5	11

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TABLE 58.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN WEST HOBOKEN.		AGE PERIODS.											
		Under one month.	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Calculi of the Urinary Passages	122	....	....	....	..	..	..	..	..	..	....	..	..
Diseases of the Bladder	123	....	....	....	..	..	..	..	..	..	....	..	..
Nonvenereal Diseases of the Male Genital Organs	126	....	....	....	..	..	..	..	..	..	....	..	..
Cysts and Other Tumors of the Ovary	131	....	....	....	..	..	..	..	1	..	....	..	..
Accidents of Pregnancy	134	....	....	....	..	..	..	..	1	..	....	..	..
Puerperal Septichæmia	137	....	....	....	..	..	..	..	..	1	....	..	..
Puerperal Albuminuria and Convulsions	138	....	....	....	..	..	..	..	1	..	1	..	..
Congenital Malformations (stillbirths not included)	150	1	....	....	..	..	..	..	..	..	....	..	..
Congenital Debility, Icterus, and Sclerema	151	14	2	....	..	..	..	..	..	..	....	..	..
Other Diseases Peculiar to Early Infancy	152	2	1	....	..	..	..	..	..	..	....	..	..
Senility	154	....	....	....	..	..	..	..	..	..	....	..	..
Suicide by Asphyxia	156	....	....	....	..	..	..	..	1	..	....	..	..
Suicide by Hanging or Strangulation	157	....	....	....	..	..	..	..	..	..	....	..	..
Absorption of Deleterious Gases (conflagration excepted)	168	....	....	....	..	..	..	..	..	..	1	..	..
Traumatism by Fall	172	....	....	....	1	..	..	..	..	..	....	..	..
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175	....	....	....	..	..	..	..	..	..	....	..	..
Cause of Death Not Specified or Ill-defined	189	1	7	3	..	..	..	..	..	..	....	..	..

Total deaths, 404. Death-rate, 11.02.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.—*Continued*

AGE PERIODS.							SEX.		COLOR.	NATIVITY.										SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	1	...	...	...	1	...	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	1	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	...	...	1	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	2	.....	1	...	...	...	...	...	...	...	...	...	...	...	1	2	...	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	9	7	.....	16	...	...	...	...	...	...	...	...	...	...	...	...	...	16	...	...
...	...	...	...	...	...	...	2	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	3	2	...	...	1	4	.....	2	1	...	1	...	...	...	...	...	...	...	2	...	1	...	4	...
...	...	1	...	...	...	...	1	1	.....	...	...	1	...	1	...	...	...	...	...	...	...	...	2	...	...	...
...	1	1	...	...	...	...	1	1	.....	...	...	...	...	1	...	1	...	...	...	...	...	...	2	...	...	...
...	...	...	...	...	...	...	...	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	1	...	...	...	...	1	...	.....	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	3	3	.....	9	...	...	1	...	1	...	...	...	...	...	...	...	...	11	...	...

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TABLE 53.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN WEST NEW YORK.		AGE PERIODS.										
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty
Typhoid Fever	1									1	
Scarlet Fever	7			2							
Whooping Cough	8		1	1							
Diphtheria and Croup	9			1	2						
Including Croup	9A			1							
Erysipelas	18			1							
Other Epidemic Diseases	19				1						
Tetanus	24										
Tuberculosis of the Lungs	28						2	3	4	1	2
Tuberculous Meningitis	30		1								
Rickets	36		1								
Cancer and Other Malignant Tumors of the Stomach, Liver	40										1
Cancer and Other Malignant Tumors of the Female Genital Organs.	42										
Cancer and Other Malignant Tumors of the Breast	43										
Acute Articular Rheumatism	47					1					
Alcoholism (acute or chronic)	56								1		
Simple Meningitis	61			1	1		1				
Including Cerebrospinal Fever	61A		2	2							
Cerebral Hæmorrhage, Apoplexy	64										1
Paralysis Without Specified Cause	66										
Convulsions of Infants	71	1	1								
Acute Endocarditis	78										1
Organic Diseases of the Heart	79								1	2	
Angina Pectoris	80										1
Diseases of the Lymphatic System (lymphangitis, etc.)	84			84							
Acute Bronchitis	89			2							
Chronic Bronchitis	90										
Bronchopneumonia	91		2	4				1			
Pneumonia	92		8	4						1	
Pulmonary Congestion, Pulmonary Apoplexy	94	1	1								
Asthma	96										
Ulcer of the Stomach	103										
Diarrhœa and Enteritis (under 2 years)	104		7	2							
Hernias, Intestinal Obstructions	109										
Hydatid Tumor of the Liver	112										
Cirrhosis of the Liver	113										
Acute Nephritis	119										
Bright's Disease	120										
Other Accidents of Labor	136										1
Puerperal Albuminuria and Convulsions	138										
Puerperal Phelgmasia Alba Doleus, Embolus, Sudden Death.	139								1		
Congenital Malformations (stillbirths not included)	150	1		1							
Congenital Debility, Icterus, and Sclerema	151	6									
Other Diseases Peculiar to Early Infancy	152	1									
Lack of Care	153		1								
Senility	154										
Suicide by Poison	155										
Suicide by Hanging or Strangulation	157										
Suicide by Firearms	159										
Other Acute Poisonings	165										1
Burns (conflagration excepted)	167										
Absorption of Deleterious Gases (conflagration excepted)	168										
Accidental Drowning	169				1						
Traumatism by Fall	173			1							
Electricity (lightning excepted)	181										1
Cause of Death not Specified or Ill-defined	189		1								

Total deaths, 176. Death-rate, 11.86.

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IN THE STATISTICAL DIVISIONS OF THE STATE OF NEW JERSEY, FOR DECEMBER 31, 1911.

AGE PERIODS.									SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Forty to forty-five	Forty-five to fifty	Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
..	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	...
..	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	...
..	..	..	..	..	..	..	..	..	3	..	.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	...
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..	..	..	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	...
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2	1	1	3	1	..	..	..	..	8	12	.....	11	..	..	3	2	..	..	1	..	3	..	..	..	..	11	6	3	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	...
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..	1	1	1	..	..	1	..	..	3	2	.....	4	..	..	1	..	..	..	..	..	..	..	..	..	..	5	..	..	...
..	1	1	..	1	1	..	..	..	..	3	.....	1	..	..	..	..	1	1	..	..	..	..	..	..	..	2	..	1	...
1	..	..	1	..	..	..	..	..	..	2	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...
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..	..	..	1	..	..	..	..	..	2	..	.....	..	..	..	1	..	..	..	..	..	..	..	..	1	..	2	..	..	...
..	..	1	..	..	..	..	..	..	1	3	.....	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	...
..	..	..	..	..	..	..	..	..	1	3	.....	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	...
..	1	3	1	3	3	..	..	..	3	9	1	4	..	..	5	1	..	..	..	..	..	..	..	2	..	5	..	7	...
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1	..	1	1	3	2	..	..	..	5	6	.....	3	..	..	5	1	1	..	..	..	..	..	..	1	..	9	..	2	...
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..	..	..	..	2	..	..	1	..	3	2	.....	2	..	..	1	2	..	..	..	..	..	..	..	..	..	2	3	..	...
..	..	1	1	1	..	..	..	..	2	1	.....	..	..	..	3	..	..	..	..	..	..	..	..	..	..	1	..	2	...
..	..	..	..	..	..	1	..	..	2	6	.....	6	..	..	..	1	..	..	..	..	..	..	..	1	..	1	6	1	...
..	1	1	1	1	..	1	..	..	7	11	.....	13	..	..	3	..	..	..	..	..	..	..	..	1	1	2	14	2	...
..	..	..	1	1	1	..	..	..	2	3	.....	2	1	..	2	..	..	..	..	..	..	..	..	..	..	1	2	2	...
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..	..	..	..	..	..	..	..	..	3	6	.....	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..	...
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..	1	1	..	..	..	..	..	..	1	1	.....	1	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	..	...
..	..	1	..	..	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
1	..	1	1	1	2	..	..	..	1	5	.....	3	..	..	..	2	1	..	..	..	..	..	..	..	..	3	..	3	...
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..	..	..	..	..	..	..	..	..	2	..	.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	...
..	..	..	..	..	..	..	..	..	4	2	.....	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	...
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..	..	..	..	1	..	..	..	..	1	..	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...
..	..	..	..	..	1	..	..	..	1	..	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
..	..	..	..	1	..	..	..	..	..	1	.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
..	1	..	..	..	..	..	..	..	..	1	.....	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	...
1	..	1	..	..	..	..	..	..	2	1	.....	1	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	..	1
..	..	..	..	1	..	..	..	..	..	2	.....	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1	..	...
..	..	..	..	..	..	..	..	..	1	..	.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	...
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TABLE 60.—TABULATION OF DEATHS FROM THE CLASSIFIED DISEASES, THE YEAR ENDING

DEATHS IN WEST ORANGE.		AGE PERIODS.												
		Under one month	Under 1 yr. "not including under 1 mo"	One to five	Five to ten	Ten to fifteen	Fifteen to twenty	Twenty-twenty-five	Twenty-five to thirty	Thirty to thirty-five	Thirty-five to forty	Forty to forty-five	Forty-five to fifty
Typhoid Fever	1											1	
Whooping Cough	8		1										
Diphtheria and Croup	9			1									
Including Croup	9A		1										
Tetanus	24				1								
Tuberculosis of the Lungs	28						1	2	2	1	4	1	
Cancer and Other Malignant Tumors of the Stomach, Liver	40												1
Diabetes	50										1		
Simple Meningitis	61	1			2								
Including Cerebrospinal Fever	61A			2									
Cerebral Hæmorrhage, Apoplexy	64		1										1
Paralysis Without Specified Cause	66												
Convulsions of Infants	71		2										
Acute Endocarditis	78												
Organic Diseases of the Heart	79												
Diseases of the Arteries, Atheroma, Aneurysm, etc.	81												
Chronic Bronchitis	90												
Bronchopneumonia	91		1	1	1								
Pneumonia	92		1	2						1			
Pleurisy	93												1
Pulmonary Congestion, Pulmonary Apoplexy	94											1	
Gangrene of the Lung	95												1
Other Diseases of the Stomach (cancer excepted)	103		1				1						
Diarrhœa and Enteritis (under 2 years)	104	8											
Bright's Disease	120			1					1	2			
Congenital Malformations (stillbirths not included)	150	1											
Congenital Debility, Icterus, and Sclerema	151	7											
Suicide by Firearms	159							1		1			
Suicide by Jumping from a High Place	161											1	
Traumatism by Other Crushing (vehicles, railroad, landslides, etc.)	175				1							1	
Homicide by Firearms	182						1						

Total deaths, 106. Death-rate, 9.14.

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AGE PERIODS.							SEX.		COLOR.	NATIVITY.											SOCIAL CONDITION.			
Fifty to fifty-five	Fifty-five to sixty	Sixty to seventy	Seventy to eighty	Eighty to ninety	Over ninety	Not stated	Male	Female	Number of decedents "color black" designated by figure in this column	United States	England	France	Germany	Ireland	Italy	Scotland	Hungary	Sweden	Russia	Holland	Other foreign	Not stated	Married	Single	Widowed	Not stated
...	...	...	...	...	...	...	1	...	.....	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	...	1	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
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1	2	...	...	...	...	...	2	5	1	10	...	...	1	1	...	...	...	1	1	...	...	...	5	7	2	...
2	...	1	...	...	...	...	1	3	.....	3	1	...	...	...	1	...	...	...	...	...	...	...	3	1	...	...
...	...	1	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
...	...	...	...	...	...	...	...	3	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
...	...	...	...	...	...	...	2	...	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
3	...	1	3	...	...	...	5	4	.....	4	...	...	2	3	1	...	...	...	...	...	...	...	3	2	4	...
...	...	1	...	...	...	...	1	...	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...
...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	1	...	1	...	...	...	...	2	.....	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	2	...
1	...	5	3	...	...	...	5	3	.....	3	2	...	1	1	1	...	...	...	...	...	1	...	5	1	3	...
...	1	1	...	...	...	...	...	2	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
1	...	...	...	...	...	...	1	...	.....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	2	1	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
1	1	5	1	...	...	...	3	4	.....	6	...	...	2	1	2	...	1	...	...	...	...	...	5	4	2	...
...	...	1	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
...	...	...	1	...	...	...	1	1	.....	1	...	1	...	...	...	...	...	...	...	...	...	...	1	...	1	...
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...	...	...	...	...	...	...	1	1	.....	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...
...	...	...	...	...	...	...	3	3	.....	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...
...	...	2	...	...	...	...	3	3	.....	5	1	...	...	...	...	...	...	...	...	...	...	...	2	4	...	...
...	...	...	...	...	...	...	1	...	.....	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
...	...	...	...	...	...	...	4	3	.....	7	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...
...	...	...	...	...	...	...	2	...	.....	1	...	...	...	...	...	...	...	...	...	...	1	...	...	2	...	...
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List of Licensed Health Officers and Sanitary Inspectors.

Following is a list of the persons who have successfully passed the examinations provided for in the act approved April 8th, 1903:

HEALTH OFFICERS.

†Budd, H. Obert.....Asbury Park, N. J.
†Hiram Williams, M.D.....Passaic, N. J.
Alex. Marcy, Jr., M.D.....Riverton, N. J.
†Wm. S. Green, M.D.....Paterson, N. J.
Walter Taylor, M.D.....Jersey City, N. J.
Maria M. Vinton, M.D.....East Orange, N. J.
†Edward Guion, M.D.....Atlantic City, N. J.
†Fred W. Sell, M.D.....Rahway, N. J.
Howard L. Baumgartner.....Asbury Park, N. J.
Lewis L. Sharp, M.D.....Palmyra, N. J.
†Ferdinand N. Sauer, M.D.....Jersey City, N. J.
†George T. Tracy, M.D.....Beverly, N. J.
†Chester H. Wells.....Montclair, N. J.
†Duncan W. Blake, Jr., M.D.....Gloucester City, N. J.
Samuel D. Mayhew, M.D.....Bridgeton, N. J.
†John O'Brien, Jr.....Montclair, N. J.
‡James A. Exton, M.D.....Arlington, N. J.
Frank H. Streightoff.....Montclair, N. J.
G. W. Fithian, M.D.....Perth Amboy, N. J.
†Henry MacDonald.....Newark, N. J.
†Leon R. Thurlow.....Plainfield, N. J.
†Edward B. Rogers, M.D.....Collingswood, N. J.
†J. I. Hoverder, M. D.....Atco, N. J.
W. U. Kurtz, M.D.....Asbury Park, N. J.
William W. Brooke, M.D.....Bayonne, N. J.
John K. Adams, M.D.....Orange, N. J.
†Thomas J. Duffield.....Asbury Park, N. J.
Henry D. Abbott, M.D.....Bayonne, N. J.
Eugene H. Sullivan.....Orange, N. J.
†J. Alex. Browne, M.D.....Paterson, N. J.
Perkins Boynton.....Little Falls, N. J.
Ellsmore Stites, M.D.....Bridgeton, N. J.
†Marcus W. Newcomb, M.D.....Burlington, N. J.
Charles P. Eaton.....Jersey City, N. J.

† In the service of the local board of health.
‡ Deceased.

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†V. M. D. Marcy, M.D.....Cape May, N. J.
‡Milton L. Somers, M.D.....Atlantic City, N. J.
†Harry H. Petit, M.D.....Ridgewood, N. J.
†John T. Connelly.....Bayonne, N. J.
†Charles J. Larkey.....Bayonne, N. J.
†T. Lee Adams.....Ocean City, N. J.
†R. H. Parsons, M.D.....Mount Holly, N. J.
Jay E. Kilpatrick.....Montclair, N. J.
William Schuler .....Orange, N. J.
William G. Schauffler, M.D.....Lakewood, N. J.
†William H. Shipps, M.D.....Bordentown, N. J.
Morris W. Clouse, M.D.....Kearny, N. J.
†Joseph J. Craven, M.D.....Jersey City, N. J.
†Selskar M. Gunn.....Orange, N. J.
Joseph Payne, M.D.....Midland Park, N. J.
†Jay G. Foose .....Montclair, N. J.
John J. Broderick, M.D.....Jersey City, N. J.
Henry H. Brinkerhoff, M.D.....Jersey City, N. J.
†George W. Lawrence, M.D.....Lakewood, N. J.
†James J. Hagan.....Jersey City, N. J.
†Charles S. Mills, M.D.....Riverton, N. J.
†Joseph Wantoch, M.D.....Carteret, N. J.
†William H. Iszard, M.D.....Camden, N. J.
Ralph O. Clock, M.D.....Burlington, N. J.
E. Irving Cronk, M.D.....New Brunswick, N J.
John L. Lund, M.D.....Perth Amboy, N. J.
†Charles McNabb.....Bound Brook, N. J.
J. C. Loper, M.D.....Bridgeton, N. J.
Henry C. James, M.D.....Mays Landing, N. J.
A. M. Heron, M.D.....Lakewood, N. J.
George H. Taylor, M.D.....Maplewood, N. J.
L. F. Meloney, M.D.....Clifton, N. J.
I. N. Griscom, M.D.....Ocean City, N. J.
James L. Ollif.....Plainfield, N. J.
†Harriet O. Mattison.....Plainfield, N. J.
†Lester Hamblet .....Asbury Park, N. J.
†John H. Winslow, M.D.....Vineland, N. J.
Grant P. Curtis, M.D.....Town of Union, N. J.
†Robert N. Hoyt.....Summit, N. J.
†J. Scott MacNutt.....Orange, N. J.
William D. Sayre, M.D.....Red Bank, N. J.
William A. Westcott, M.D.....Berlin, N. J.
H. W. Ingling, M.D.....Freehold, N. J.
Fred H. Stover.....Boston, Mass.
Nelson Elliott, M.D.....Passaic, N. J.
William M. Barnes, M.D.....Milburn, N. J.
John A. C. Tull, M.D.....Ventnor, N. J.
William C. Craig, M.D.....Ridgewood, N. J.
Charles B. Bleasby, M.D.....Garfield, N. J.
Josiah Meigh, M.D.....Bernardsville, N. J.
George T. Palmer.....Trenton, N. J.
Carl T. Pomeroy.....Plainfield, N. J.
Fritz M. Arnolt.....Hackensack, N. J.

† In the service of the local board of health.
‡ Deceased.

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Joseph C. Saile.....Bloomfield, N. J.
†William J. Willsey.....New Brunswick, N. J.
†Frank A. Frederick, Sr.....West Hoboken, N. J.
Frank A. Frederick, Jr.....West Hoboken, N. J.
Morris Farkas, M.D.....West Orange, N. J.
†A. S. Fell, M.D.....Trenton, N. J.
Alfred A. Mutter, M.D.....Arlington, N. J.
W. R. Rieck, M.D.....Arlington, N. J.
†Max Colton .....New Brunswick, N. J.
†John G. Taylor.....Dover, N. J.
F. M. Hoffman, M.D.....New Brunswick, N. J.

PLUMBING INSPECTORS.

†Henry B. Francis.....Camden, N. J.
Joseph Sonnenberg .....Irvington, N. J.
Conrad Deuchler .....Newark, N. J.
Charles M. Whelan .....Trenton, N. J.
†William F. Brode.....Atlantic City, N. J.
†Thomas D. Clark.....Woodbury, N. J.
Edward J. Kelly.....Jersey City, N. J.
Thomas F. Harris.....Orange, N. J.
†G. H. Soult.....Ridgewood, N. J.
Henry A. W. Smith.....Ocean City, N. J.
Hugh F. Parle.....Jersey City, N. J.
R. LeRoy Skillman.....Newark, N. J.
Andrew McGookin, Jr.....Newark, N. J.
Frederick W. Nichols.....Newark, N. J.
Luke J. Devine.....Elizabeth, N. J.
James Barnard .....Trenton, N. J.
Frank H. Fitzgeorge.....Trenton, N. J.
George F. Shafer.....Hackensack, N. J.
Charles F. West.....Gloucester City, N. J.
Bernard B. Reiley.....New Brunswick, N. J.
P. W. Borrows.....Ridgefield Park, N. J.
Arthur G. Reeves.....Cape May City, N. J.
James H. Kiernan.....Jersey City, N. J.
Edward A. Sullivan.....Newark, N. J.
Gustave A. Albiez.....Newark, N. J.
William F. Specht, Jr.....Atlantic City, N. J.
Jacob Kull.....Newark, N. J.
Eugene Lau .....Newark, N. J.
Peter A. Degnan.....Newark, N. J.
David Entwistle .....Jersey City, N. J.
Tunis Looi .....Lodi, N. J.
James A. Marnell.....Hoboken, N. J.
Rudolph Riemenschneider.....Town of Union, N. J.
W. J. Large.....Vineland, N. J.
Charles Steller .....Townof Union, N. J.
Martin D. Karl.....Garfield, N. J.
Adam J. Hammer.....Elizabeth, N. J.
Leavett F. Kelley.....Newark, N. J.
W. George Lambert.....Riverside, N. J.

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Martin V. Driscoll.....Jersey City, N. J.
Herbert J. Mason.....Vineland, N. J.
Charles F. Shaw.....Collingswood, N. J.
William F. Ziegler.....West Hoboken, N. J.
Archibald A. Kafar, Jr.....Bordentown, N. J.
Edward A. Dugan.....Gloucester City, N. J.
Cornelius V. Carty.....East Rutherford, N. J.
Frederick J. Dyer.....Grantwood, N. J.
Frank S. Kievitt.....Passaic, N. J.
G. E. Bangs.....West Hoboken, N. J.
Jason H. Wildrick.....Washington, N. J.
Clarence B. Slack.....Trenton, N. J.
Richard W. L. Osthoff.....Bogota, N. J.
Joseph M. Loeffler.....Newark, N. J.
George M. Crawley, Jr.....Newark, N. J.
Conrad C. Hoffmeier.....West Hoboken, N. J.
J. Elmer Deppe.....Newark, N. J.
Robert B. Murphy.....Ridgewood, N. J.
Newton DeBaun.....Hackensack, N. J.
Alex. Weir, Jr.....West Hoboken, N. J.
Richard T. Bagg.....Vineland, N. J.
Jos. Lendner.....West New York, N. J.
John Nolan.....Bayonne, N. J.
Vincent Ahlemeyer.....Jersey City, N. J.
Chas. Munzing.....Jersey City, N. J.
Michael Saul.....Newark, N. J.
John J. Waters.....Jersey City, N. J.
R. C. Adamson, Jr.....Long Branch, N. J.
Irving J. Demarest.....Westwood, N. J.
Patrick J. Ryan.....Wallington, N. J.
Patrick J. Hennessy.....Jersey City, N. J.
Hubbard Ferguson.....Ridgewood, N. J.
Joseph P. Lee.....Jersey City, N. J.
B. H. Sooy.....Atlantic City, N. J.
Samuel Powell.....Roselle Park, N. J.

SANITARY INSPECTORS OF FIRST CLASS.

†Fred W. Hering.....Jersey City, N. J.
†George W. Gilmore.....Newark, N. J.
†Fred C. Robertson, M.D.....Jersey City, N. J.
†John T. McClure.....Harrison, N. J.
†John G. Taylor.....Dover, N. J.
Charles E. Bellows.....Bridgeton, N. J.
†Albert E. Geissler.....Kearny, N. J.
Thomas Ainge.....Lansing, Mich.
Charles S. Voorhis.....Palmyra, N. J.
†Lewis E. Boutillier.....Newark, N. J.
†Joseph C. Saile.....Bloomfield, N. J.
†Casper Benz.....Newark, N. J.
†Robert W. Meeker.....Plainfield, N. J.
†John K. Bennett, M.D.....Gloucester City, N. J.

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William H. Addis.....Plainfield, N. J.
William W. Heberton, M.D.....South Orange, N. J.
Eric Ordell .....Newark, N. J.
John Greaves .....Jersey City, N. J.
†John E. Rowe, D.V.S.....Summit, N. J.
George N. Smith .....Newark, N. J.
†Frank Denecklan .....Plainfield, N. J.
J. H. C. Hunter.....Dover, N. J.
Chauncey V. Bunnell.....Jersey City, N. J.
†Charles F. Conrad.....Newark, N. J.
Percy W. Sipp.....Newark, N. J.
†H. S. Winterhalter.....Bayonne, N. J.
Jay E. Kilpatrick.....Montclair, N. J.
W. J. E. Seder.....Newark, N. J.
†Alonzo Brower .....Freehold, N. J.
†Frederick E. Wilson .....Bayonne, N. J.
David R. Thompson.....Delaware City, Del.
†Jay G. Foose.....Montclair, N. J.
†William H. Lowe, D.V.S.....Paterson, N. J.
Charles W. Harreys, M.D.....Ridgewood, N. J.
Joseph C. Bitler, M.D.....Hammonton, N. J.
†Lynford E. Tuttle, M.D.V.....Bernardsville, N. J.
James L. Ollif.....Plainfield, N. J.
J. J. Reason, M.D.....Carteret, N. J.
†Alfred C. Benedict, M.D.....South Orange, N. J.
†John H. Winslow, M.D.....Vineland, N. J.
†Harry R. Ingalls.....Asbury, Park, N. J.
Edward F. Flynn.....Newark, N. J.
†Elvia Scott .....South Orange, N. J.
Harris Day, M.D.....Chester, N. J.
A. I. Goehrig.....Trenton, N. J.
Harry E. Moffett .....Newark, N. J.
Irwin C. Dakin.....Newark, N. J.
William Gleuck, Jr.....Newark, N. J.
Fred S. Ball, M.D.....Lakewood, N. J.
†Felix McGee .....Millburn, N. J.
Charles E. Divine.....Newark, N. J.
†Charles McNabb .....Bound Brook, N. J.
James J. Waters.....Newark, N. J.
†John L. Lund, M.D.....Perth Amboy, N. J.
Edward Mulvaney, M.D.....Jersey City, N. J.
John J. Magner, M.D.....Jersey City, N. J.
Edward J. Devitt.....Jersey City, N. J.
†J. L. Ebbels.....Montclair, N. J.
H. G. Eakin.....Union Hill, N. J.
Joseph R. Bartlett.....Atlantic City, N. J.
Frank V. Wilkinson.....Newark, N. J.
Edwin E. Taber.....Long Branch, N. J.
†John A. Manson.....Dover, N. J.
†Lester J. Hamblet.....Asbury Park, N. J.
Clarence A. Lamont.....Asbury Park, N. J.
Alex. M. Heron, M.D.....Lakewood, N. J.
Abram A. Lydecker, M.D.....Haledon, N. J.

† In the service of the local board of health.

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Howard H. Huffert.....Newark, N. J.
†Sylvester Utter, M.D.....Paterson, N. J.
F. Wm. Stahuber.....Trenton, N. J.
William Morris .....Roselle Park, N. J.
John W. Garey.....Atlantic City. N. J.
†James P. McNair.....Paterson, N. J.
Thomas J. Steele.....Jersey City, N. J.
Walter B. Delaney.....Jersey City, N. J.
John C. Harnett.....Jersey City, N. J.
Henry A. Bonynge, M.D.....Ridgewood, N. J.
C. H. W. Van Sciver.....Burlington, N. J.
†Frank S. Harris.....Salem, N. J.
Stanley S. Williams.....Newark, N. J.
Patrick J. Brogan.....Newark, N. J.
Samuel Bachman .....Newark, N. J.
†Sadie H. Layton.....Asbury Park, N. J.
†Frank A. Frederick.....West Hoboken, N. J.
Andrew Carney, Jr.....North Plainfield, N. J.
†John J. Belbey.....Morristown, N. J.
Gustavus E. Freideman.....Newark, N. J.
†Ralph L. Huttenloch.....Montclair, N. J.
William McKeon .....Paterson, N. J.
†H. W. Hartman, M.D.....Keyport, N. J.
†John T. McClure, Jr.....Harrison, N. Y.
Adolph O. Elsasser.....Newark, N. J.
John Q. Larkin.....Jersey City, N. J.
H. L. Harley, M.D.....Pleasantville, N. J.
Frederick W. Nichols.....Newark, N. J.
George C. Losey.....Washington, N. J.
Clarence I. Palmer.....Newark, N. J.
Fritz M. Arnolt.....Albany, N. Y.
B. F. Seaman, M.D.....Raritan, N. J.
George A. West.....Raritan, N. J.
C. P. Deyoe, M.D.....Ramsey, N J.
J. Alonzo Beek, M.D.....Gloucester City, N, J.
Frederick A. Stetter.....Asbury Park, N. J.
Edward A. Cleary.....Newark, N. J.
Thomas P. Walsh.....Newark, N. J.
Thomas F. Boles.....Newark, N. J.
William B. Palmer.....Orange, N. J.
Frank Brouwer, M.D.....Toms River, N. J.
Thomas J. Carter.....Newark, N. J.
Charles A. Keating, M.D.....Paterson. N. J.
†Wm. C. Allen.....Trenton, N. J.
†Edward L. Titus.....Trenton, N. J.
Lloyd M. Van Ness.....New Brunswick, N. J.
†Max J. Colton.....New Brunswick, N. J.
†Henry V. Amerman.....Kearny, N. J.
Edward H. Salmon, M.D.....Jersey City, N. J.
Myron J. Seely.....Montclair, N. J.
Wallace T. Eakins.....New Brunswick, N. J.
John S. Young, M.D.....Rahway. N. J.
Fred J. Dyer.....Grantwood, N. J.

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Milton E. Baxter.....Jersey City, N. J.
N. J. R. Chandler.....Plainfield, N. J.
John F. Boylan.....Bayonne, N. J.
Leavett F. Kelley.....Newark, N. J.
Chas. E. Messerschmidt.....Newark, N. J.
Samuel Denton .....Bayonne, N. J.

SANITARY INSPECTORS OF SECOND CLASS.

†Charles Cunningham, M.D.....Hammonton, N. J.
†Franklin P. Vanlier.....Woodstown, N. J.
†Joseph J. Clickenger.....Irvington, N. J.
†J. C. Shinn, M.D.....Jamesburg, N. J.
George Wildman.....Belmar, N. J.
John M. Bensel.....Pleasantville, N. J.
George S. Everett.....Linden, N. J.
Frederick J. Dyer.....Grantwood, N. J.

SANITARY INSPECTORS OF THIRD CLASS.

David Jamieson .....Gloucester City, N. J.
†Robert A. Hirner.....Woodbridge, N. J.
Robert Dickson .....Fair Haven, N. J.
T. Nelson Lillagore.....Ocean Grove, N. J.
William B. Smith .....Belleville, N. J.
Adrian Hommell .....Asbury Park, N. J.
William B. Davis.....Morris Plains. N. J.
J. N. Fowler.....Port Norris, N. J.

MEAT INSPECTORS.

†G. F. Harker, D.V.S.....Trenton, N. J,
†Richard W. Hewitt, D.V.S.....Camden, N. J.
Willet H. Cooper, D.V.S.....Trenton, N. J.
‡Albert T. Sellers, D.V.S. .....Camden, N. J.

†In the service of the local board of health.
‡ Deceased.

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List of Sanitary Districts

With Names and Addresses of Officers and Members.

CITIES.

Absecon, Atlantic county; population, 781. Dr. E. H. Madden, President; Dr. W. C. Sooy, Martin Spickerman, Samuel Johnson, Clerk and Registrar; Dr. C. C. Allen, Inspector.

Asbury Park, Monmouth county; population ,10,150. David W. Sexton, President; Theodore H. Beringer, Charles J. Black, Arthur F. Cottrell, William La Baw, Israel R. Taylor, George Turner, Samuel A. Patterson, Attorney, B. H. Obert, Health Officer, Secretary and Registrar of Vital Statistics; H. R. Ingalls, F. A. Stetter, Sanitary Inspectors; Miss S. H. Layton, Clerk.

Atlantic City, Atlantic county; population, 46,150. Commission Form of Government. Alfred T. Glenn, Registrar and Clerk; Edward Guion, M.D., Health Officer; H. C. Beck, Chief Inspector; Thos. W. Clement, Food Inspector; W. F. Brode, Plumbing Inspector; John Bensel, Chas. McDowell, Ben Sooy, Assistant Health Inspectors.

Bayonne, Hudson county; population, 55,545. John Cook, M.D., President; M. T. Cronin, E. F. Carbin, J. J. Knight, Jerry Lisk, L. Epstein, Eugene Macchi, H. S. Winterhalter, Inspector; John Harding, Clerk.

Beverly, Burlington county; population, 2,140. R. P. Hains, President; Geo. A. Smith, Wm. B. Jester, Barton Kyle, James D. Fish, Chas. J. Parsons, Clerk and Registrar; Geo. T. Tracy, M.D., Inspector.

Bordentown, Burlington county; population, 4,250. S. E. Burr, President; E. L. Thompson, S. R. Magee, J. W. Higgins, David R. Brown, W. M. Kester, Clerk; Jos. R. Malone, Registrar; Amos P. Thorn, Inspector.

Bridgeton, Cumberland county; population, 14,209. Francis S. McKee, President; Dr. John H. Moore, De Voe Tomlinson, Joseph Miller, Fred S. Conner, John Nixon, Sidney O. Williams, Secretary; Jacob B. Jones, City Cerk and Registrar; Dr. John C. Loper, Health Officer.

Burlington, Burlington county; population, 8,336. Franklin S. Carter, President; George W. Shinn, William R. Schuyler, Neal D. Keeler, J. B. Cassady, M. D. Thomas, S. Mooney, Clerk and Registrar; C. H. W. Van Sciver, Inspector.

Camden, Camden county; population, 94,538; Henry H. Davis, M.D., President; R. H. Gaskill, Wm. I. Kelchner, M.D., S. G. Bushey, M.D., M. K. Mines, M.D., M. F. Middleton, M.D., E. Wilmer Collins, Eugene B. Roberts, Clerk; Wm. D. Brown, Registrar; John F. Leavitt, M.D., Henry B. Francis, Jos. A. Starr, Wm. H. Iszard, M.D., G. H. Robinson, Lewis A. Lee, Lewis P. Munion, Health Inspector.

Cape May, Cape May county; population, 2,471. Dr. A. L. Leach, President; Dr. V. M. D. Marcy, W. R. Sheppard, Geo. L. Lovett, Robt. S. Hand,

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Wm. Porter, Clerk; Thos. W. Millet, Registrar; Dr. V. M. D. Marcy, Inspector; A. G. Reeves, Plumbing Inspector.

East Orange, Essex county; population, 34,371; Roger H. Butterworth, President; Frank B. Lane, Ralph H. Hunt, Dewitt Cook, Jr., John W. Mooney, Helen W. De Morest, Clerk; Lincoln E. Rowley, City Clerk and Registrar; Edward W. Lindsley, Inspector; Chas. W. Banks, Bacteriologist; Wm. T. Bowman, Health Officer.

Egg Harbor, Atlantic City; population, 2,181. August A. Breder, President; Myrtile Frank, M.D., William Morgenweck, Jr., Clerk and Registrar; Henry G. Regensburg, Henry Otto, Inspectors.

Elizabeth, Union county; population, 73,409. John W. Whelan, President; J. L. Bauer, S. R. Brown, M.D., E. W. Connell, T. E. Dolan, M.D., J. J. Heck, S. M. Williams, John F. Kenah, Registrar and Clerk; L. J. Richards, Health Officer and Inspector; P. J. Connell, H. Toole.

Englewood, Bergen county; population, 9,924. Geo. B. Best, M.D., T. W. Lydecker, Edward Koster, Valentine Ruch, M.D., Gilliam D. Bogert, Secretary and Cerk; Robert Jamieson, Registrar; John A. Manson, Inspector.

Gloucester City, Camden county; population 9,462. Harlan S. Miner, President; John F. Blandy, Samuel Shuster, W. F. MacLennan, M.D., Stokes Prickett, Alonzo Cheesman, A. D. Koenemann, Clerk; Chas. F. West, Registrar; John K. Bennett, M.D., Health Inspector; Robert J. Fair, Acting Plumbing Inspector.

Hoboken, Hudson county; population, 70,324. Joseph K. Stack, President; J. H. Timken, John J. Rudolph, S. Lubash, M. Weisbarth, Joseph S. Tucker, Clerk and Registrar; Antonio Granelli, Inspector; John Beronio, Assistant Inspector; James Marnell, Plumbing Inspector; W. T. Kudlich, M.D., Health Warden; Allan Moore, Attorney.

Jersey City, Hudson county; population, 267,779. H. H. Brinkerhoff, M.D., President; Charles E Putnam, M.D., George E. McLaughlin, M.D., Charles H. Finke, M.D., Louis Franklin, M.D., John H. Flesey, Everett Gray, Joseph A. Sprouls, Charles L. Francke, Burt F. Walsh, James J. Hagan, Health Officer and Secretary; Joseph A. Carlin, Registrar.

Lambertville, Hunterdon county; population, 4,657. Edward W. Closson, M.D., President; William R. Bowne, Harry K. Kramer, Louis C. Williams, M.D., Oliver C. Holcombe, James Moonan, James H. Reynolds, Clerk and Registrar; Charles S. Closson, Inspector.

Long Branch, Monmouth county; popuation, 13,298. Bryant B. Newcomb, President; Frank L. Howland, John W. Flock, Thomas V. Arrowsmith, Marshall Woolley, Winfield R. Warwick, Clerk and Registrar; Edward E. Taber, Inspector.

Margate City, Atlantic county; population, 129. James Boice, Clerk.

Millville, Cumberland county; population, 12,451. John W. Wade, M.D., President; James R. Headley, Harvey L. Thomas, L. H. Hogate, Clerk and Registrar; Frank Bullock, Health Inspector; John D. Brandriff, Plumbing Inspector; H. G. Miller, M.D., Physician to the Board.

***Newark, Essex county;** population, 347,469. David D. Chandler, Secretary and Health Officer.

New Brunswick, Middlesex county; population, 23,388. Dr. Fred B. Kilmer, President; Joseph H. Ridgeway, Dr. E. I. Cronk, James A. Morrison, Dr. A. L. Smith, Dr. Benjamin, Gutmann, E. J. McMurtry, Registrar; William H. Van Deursen, Max J. Colton, Inspectors.

Northfield City, Atlantic county; population, 866. Joseph Lake, President; A. H. Vickers, T. L. McConell, William Oxley, E. C. Duberson, Clerk and Registrar.

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*No report received.

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Ocean City, Cape May county; population, 1,950. Commission Form of Government. I. N. Griscom, Registrar and Health Officer.

Orange, Essex county; population, 29,630. G. H. Richards, M.D., President; D. W. Poor, M.D., B. M. Arnold, L. B. Clark, O. S. Williams, Thomas Dowling, J. J. English, William B. Palmer, Clerk; J. Scott MacNutt, Registrar; Richard Savage, Inspector; William A. Webber, Temporary Inspector.

Passaic, Passaic county; population, 54,773. Mayor George N. Seger, President; Dr. William H. Carroll, C. F. H. Johnson, George H. Michels, Abraham Preiskel, Virginia Hand, Secretary; Thomas R. Watson, Registrar; John N. Ryan, M.D., Health Officer; Philip Morris, City Sanitarian; Frank Kievitt, Plumbing Inspector; J. Payne Lowe, M.D., Veternary Inspector; Leo H. Joyce, M.D., Chief Medical Inspector, Jacob Cooper, Special Officer.

Paterson, Passaic county; population, 125,600. John L. Leal, M.D., President; James F. Briody, M.D., James J. Maher, Francis H. Todd, M. D., Franklin Van Winkle, J. Alex. Browne, M.D., Health Officer, James P. McNair, Clerk. Charles S. Gall, Registrar; James Fitzpatrick, William McKeon, William MacDonald, William S. Green, M.D., William Herbert Lowe, D.V.S., Inspectors.

Perth Amboy, Middlesex county; population, 32,121. Justus Kaletsch, President; P. N. Kennedy, A. R. A. Overgoard, John A. Peterson, Leo Schwartz, Harvey A. Seil, George Wustefeld, John L. Lund, Inspector; Wilbur La Roe, Secretary and Registrar.

Plainfield, Union county; population, 20,550. Dr. William H. Murray, Dr. T. S. Davis, Secretary; S. H. Voorhees, Treasurer; A. E. Force, William M. Wherry, Jr., Harriet O. Mattison, Clerk, Registrar and Health Officer; John O'Brien, Jr., Health Officer; William Addis, Sr., N. J. Randolph Chandler, Inspectors.

Port Republic City, Atlantic county. population, 405. Daniel Fielder, President and Inspector; William Van Sant, Thomas A. York, John W. Barton, Clerk.

Rahway, Union county; population, 9,337. Joseph G. Smith, President; Walter E. Cladek, M.D., William H. Randolph, John T. Brickall, Edward J. Ghegan, Charles H. Lambert, Clerk and Registrar; Fred J. Mix, Inspecto.

Salem, Salem county; population, 6,614. Charles R. Markley, President; R. M. A. Davis, M.D., L. H. Hummel, M.D., Harry Crispin, Frank A. Grier, Charles R. Sharp, Warren Trullender, W. Leslie Swain, Clerk; Frank S. Harris, Registrar.

Sea Isle City, Cape May county; population, 551. Thomas Mitchell, President. Dr. Stimus, Harold Sutton, Dr. Perry, James Eustace, Secretary and Cerk; Alfred Steelman, Registrar.

Somers Point, Atlantic county; population, 604. William M. Himebach, President; Jacob Schick, Jr., George Middleton, Clerk and Registrar.

South Amboy, Middlesex county; population, 7,007. Dr. E. H. Eulner, President; Jos. A. Sexton, Thomas C. Gelsinon, Clerk; Joseph Wilson, Registrar; William H. Parisen, Inspector.

Summit, Union county; population, 7,500. Dr. William H. Lawrence, Jr., President. James G. Owens, Parker W. Page, M. J. Kenny, Dr. Thomas B. Prout, Dr. J. Edward Rowe, Clerk, Registrar and Health Officer; Carl T. Pomeroy, Assistant Officer; T. J. Scott, Plumbing Inspector.

***Trenton, Mercer county;** population, 96,815. Howard H. Ely, Registrar; Dr. A. S. Fell, Health Officer.

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*No report received.

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Ventnor City, Atlantic county; population, 491. I. B. Sweigart, President; Fred H. Rogers, M. F. Stevenson, Adolph E. Appel, James G. Scull, Clerk and Registrar.

Woodbury, Gloucester county; population, 4,642. H. B. Diverty, M.D., President. William T. Cooper, Samuel B. Burkett, George P. Pierce, William A. Fisher, William Sennett, Theo. S. Burrows, Clerk; Arthur Starr, Clerk and Registrar; Joshua Dawson, T. D. Clark, Inspectors.

*No report received.

BOROUGHS.

Allendale, Bergen county; population, 937. W. E. Carver, President; M. J. Couch, James A. Hubbard, John A. Mallinson, A. B. Smith, Clerk and Registrar.

Allenhurst, Monmouth county; population, 306. George D. Morrow, President; Harry W. Danty, Thomas L. King, Arthur Davenport, Ira E. Whyte, George B. Cade, Clerk and Registrar; E. Hart Havens, Inspector.

Allentown, Monmouth county; population, 634. Dr. H. Emley, President; Dr. H. Johnson, Charles Spaulding, Dr. H. M. Anderson, Clerk; William Forsythe, Registrar and Inspector.

Alpha, Warren county; population, —, Dr. Isaac Borts, President; William Quisman, William H. Beatty, Orvil Halpin, Cleveland M. Rhen, Clerk and Registrar; Jeremiah Still, Inspector.

***Alpine, Bergen county;** population, 377. L. H. Tavernier, Clerk and Registrar.

Andover, Sussex county; population, 884. Dr. J. C. Clark, President. Samuel S. Wills, John C. Hegarty, William E. Willson, Clerk; Samuel H. Willson, Registrar...

Atlantic Highlands, Monmouth county; population, 1,645. Dr. B. E. Failing, President; Joseph Trunen, F. W. Reiter, James S. Mason, Dr. C. A. Reed, W. F. Franklin, Clerk and Registrar; John R. Snediker, Inspector.

Audubon, Camden county; population, 1343. John Yardley, President; William Gloche, Robert Morrell, Joseph Williams, Howard Callingham, Clerk and Registrar; Frederick Weichard, Inspector.

Avalon, Cape May county; population, 230. Bennajah Wills, President; Howard High, Charles Shemley, George Howard, Hugh H. Holmes, Edmund O. Howell, Jr., Registrar.

Avon, Monmouth county; population, 426. Frank A. Sofield, President; Dr. Wm. Gorden, Dr. F. G. Angeny, John Supple, Clerk and Registrar; H. E. Stanton, Inspector.

***Barnegat City, Ocean county;** population, 70. J. C. Woodmansee, Clerk.

***Bay Head, Ocean county;** population, 281. Julius Foster, Assessor.

Beach Haven, Ocean county; population 272. A. J. Durand, President; George Grant, William Parker, Herbert Willis, Clerk and Health Officer. Sam S. Andrews, Registrar.

Belmar, Monmouth county; population, 1,433. Wallace G. Hooper, President; William M. Bergen, Daniel C. Conklin, Jr., Charles S. Goff, Wilmer H. Hoffman, Jacob Rosenfeldt, Dr. Fred V. Thompson, Charles O. Hudnut, Clerk and Registrar; Britten M. Bennett.

Bergenfield, Bergen county; population, 1,991. W. Banta Van Saun, President; Henry Hess, George P. Pitkin, M.D., Charles F. Wortendyke, Clerk; John J. Huyler, Registrar; George Schafer, Inspector.

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*No report received.

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Bloomsbury, Hunterdon county; population, 600. Theo. Melick, President; J. V. Willever, George Hawk, E. L. Reigle, W A. Rutt, Clerk and Registrar; Dr. J. M. Betts, Inspector.

Bogota, Bergen county; population, 1,125. Frank R. Wesley, President; Russell B. Lord, Frank J. Pavlis, Jos. Mallon, Dr. George L. Edwards, John F. Hill, Clerk and Registrar; R. H. L. Osthoff, Inspector.

Bound Brook, Somerset county; population, 3,970. J. T. Robinson, President; Dr. C. R. T. Fisher, G. Stryker, William Schure, Clerk, Charles McNabb, Registrar and Inspector.

Bradley Beach, Monmouth county; population, 1,807. W. W. Danin, William Hausler, E. L. Johnson, C. F. Burney, Clerk and Registrar; George Bostick, Inspector.

***Branchville, Sussex county;** population, 663. John A. McCarrick, Clerk and Registrar.

***Brigantine City, Atlantic county;** population, 67. E. R. Smith, Registrar.

Butler, Morris county; population, 2,265. George C. Coates, President; Rudolph Guenter, E. P. Smithyman, Samuel K. Owen, Secretary; Allan Looker, Registrar.

Caldwell, Essex county. population, 2,236. Isaac E. Baldwin, President; William H. Van Wart, Lawrence M. Hicks, Edwin E. Bond, M.D., William J. Gray, Clerk; John J. Van Order, Registrar; Chester H. Wells, Inspector.

Cape May Point, Cape May county; population, 162. Amnon Wright, President; I. Hazzard, Charles Markley, Albert Schellinger, Frank R. Bowne, Clek; J. W. Corson, Registrar; Dr. V. M. D. Marcy, Inspector.

Carlstadt, Bergen county; population, 3,807. Louis Cuneo, President. Charles Lonz, Herman A. Schmidt, Dr. E. P. Sickenberger, Rudolph Rayner, Clerk and Registrar; Anthony Sachs, Temporary Inspector.

Chatham, Morris county; population, 1,874. Bert A. Prager, M.D., President; J. Thomas Scott, Hervey S. De Groodt, David H. Crawford, Secretary and Registrar; George L. Kelley, John J. McCormack, Inspector; Lawrence Day, Attorney.

***Chesilhurst, Camden county;** population, 246. J. T. Humphries, Clerk and Registrar.

Clayton, Gloucester county; population, 1,926. Clinton D. Nelson, President. A. G. Silver, R. L. Campbell, Joseph Hille, C. F. Fisher, M.D., Clerk and Registrar; C. D. Nelson, Inspector.

Cliffside Park, Bergen county; population, 3,394. E. C. Hellstern, President; D. P. Woods, J. J. Cohn, J. C. Vosburgh, O. R. McElwain, Clerk and Registrar; Fred Dyer, Inspector.

***Clinton, Hunterdon county;** population, 836. George A. Hall, Clerk.

Closter, Bergen county; population, 1,483. J. M. F. Updike, President; B. F. Blackledge, Christian Gerke, Charles A. Richardson, M.D., Alfred Anderson, Clerk and Registrar.

Collingswood, Camden county; population, 4,795. C. W. Batchelor, President; Henry Bennett, J. C. Doughten, A. Heeneke, R. A. Gribbon, P. G. Knebel, Edward Fitz, C. C. Powell, Clerk and Registrar; Edward S. Sheldon, M.D., Edward B. Rogers, Charles F. Shaw, Ernest F. Simpson, Inspectors.

Cresskill, Bergen county; population, 550. Paul O. E. Ruhl, Philip F. Nestel, John Ferdon, Clerk and Secretary; George Y. Allaire, Registrar.

Deal, Monmouth county; population, 273. Dr. Robert Offenbach, William Hogencamp, Edward O'Rourke, Charles Fritz, Clem. Conover, Clerk.

Delford, Bergen county; population, 1,005. J. D. Hoffmire, President; Walter G. May, William Williams, Huyler, Voorhis, Clerk. J. S. Voorhis, Registrar; Dr. S. A. Vandewater.

* No report received.

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*Demarest, Bergen county; population, 560. John F. Purcell, Clerk.

Dumont, Bergen county; population, 1,783. George S. Clark, President; Frank Hill, Fred Kleppe, Harry Lamar, Frank Hill, Clerk and Registrar; J. E. Pratt, Inspector.

Dunellen, Middlesex county; population, 1,990. Ed. Pennock, President; L. T. Churchill, Thomas H. Platt, C. W. Blain, Thomas Hogan, Clerk; C. A. Coriell, Jr., Registrar. G. Smalley, Temporary Inspector.

East Newark, Hudson county; population, 3,163. Joseph North, President; Dr. John Pringle, F. H. Palardy, Joseph McDonald, E. J. McKenna, Clerk; F. H. Palardy, Registrar; John Keenan.

East Rutherford, Bergen county; population, 4,275. George Sanders, President; Oscar Fortenbach, Neil Casper, L. B. Dupuy, Fred Taylor, Dr. Charles D. Brooks, Ella M. Niederer, Registrar; C. V. Carty, Inspector.

Edgewater, Bergen county; popuation. 2,655. Edward M. Fitzgerald, President; George W. Allison, John E. Mulligan, Thomas Bradley, Arthur J. Carleton, Clerk and Registrar.

Elmer, Salem county; population, 1,167. Isaac B. Reeve, President; Dr. J. V. Conover, C. H. Morris, E. T. Vandergrift, E. E. Hires, M. S. Black, M. D. Clerk, Hiram Van Meter, Registrar.

Emerson, Bergen county; population, 767. Diedrick Wulff, President; Nicholas Paradise, Rocco Alexander, Frank W. Space, B. F. Williams, Registrar.

*Englewood Cliffs, Bergen county; population, 410. Emil Vyborny, Registrar.

*Englishtown, Monmouth county; population, 468. Elmer E. Christie, Clerk and Registrar.

Essex Fells, Essex county; population, 442. James C. Sprigg, President; Louis P. Bolger, Wilmer A. Briggs, Frederick W. Robinson, Daniel M. Wootton, Clerk and Registrar; E. P. Eyesoldt, Inspector.

Fair Haven, Monmouth county; population. —. G. B. Hodgman, President; L. M. Dashiell, John J. Naulty, D. O. Wolcott, Clerk; G. V. V. Warner, M.D., Registrar.

Fairview, Bergen county; population, 2,441. John Engel, President; Robert J. Hopkins, Owen O'Connor, V. Marolda, John S. Tracy, Clerk and Registrar.

Fanwood, Union county; population, 471. Dr. F. W. Westcott, President; A. D. Beeken, Philip Nieder, C. A. Vincent, S. W. McAneny, Registrar.

Farmingdale, Monmouth county; population, 416. A. A. Yard, President; Iva Bound, Harry Goodnough, Elwood Applegate, Harry Hulsart, Clerk.

Fieldsboro, Burlington county; population, 480. Robert Bignall, President; Walter Griffith, Joseph Hesley, W. J. Leirson, Reuben Parker, W. H. Errickson, Clerk.

Flemington, Hunterdon county; population, 2,693. A. C. Hulsizer, Mayor; Daniel McPherson, President; William E. Corcoran, Charles V. Weiler, R. C. Harsell, William Alvater, F. E. Green, Clerk.

Florham Park, Morris county; population, 558. Charles H. Genung, President. Larne Ten Eick, DeWitt C. Ward, George E. Felck, Frank Budd, William V. Tunis, Clerk and Registrar; Dewitt C. Ward, Inspector.

Folsom, Atlantic county; population, 232. Jacob Blazer, Jr., President; Henry Roller, Jacob O. Roller, Joseph Linback, Louis Schulze, Registrar.

Fort Lee, Bergen county; population, 4,472. David E. King, President; S. J. Corker, Jerome Sardis, William Low, George Roedels, Alfred Junghaus, Registrar, Health Officer and Sanitary Inspector; Dr. Max Wyler.

*No report received.

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*Frenchtown, Hunterdon county; population, 984. Preston S. Bloom, Registrar.

Garfield, Bergen county; population, 10,213. Ernest B. Dahnert, President; Max Walters, George Maitland, Harry Schmittroth, Louis H. Heinzman, Clerk and Registrar; Martin D. Karl, Oepka Bonnema, Dr. John H. Bakelaw, Inspectors.

Garwood, Union county; population, 1,118. Adam H. Muller, President; J. M. Cowell, W. T. Mead, W. S. McManus, Burton M. Galloway, Clerk and Registrar; Andrew Carney, Jr., Inspector.

Glen Ridge, Essex county; population, 3,260; Dr. H. C. Harris, President; W. W. Schouler, F. D. Bell, A. T. Benedict, H. K. Benson, Secretary; John A. Brown, Registrar; James E. Brooks, Inspector.

Glen Rock, Bergen county; population, 1,055. C. M. Viel, President; James May, J. L. Pilkington, William G. Griffiths, Clerk; H. C. Pennal, Registrar; Hubbard Ferguson, Dr. C. W. Harrys, Inspectors; D. D. Zabriskie, Counsel.

Haddonfield, Camden county; population, 4,142. Stanley W. Rusk, President; Alfred J. Shuster, Herbert D. Shivers, William W. Hodgson, William H. Harrison, Clerk and Registrar; Edward F. Magill, Inspector.

*Haddon Heights, Camden county; population, 1,452. Dr. Geo. W. Walters, President. J. B. Reeves, W. H. Carney, D. D. S., Clerk; E. N. C. Davis, Registrar; E. R. Jenks, Inspector.

Haledon, Passaic county; population, 2,560. Charles G. Staderman, President; Fred Wenzel, Andrew Prignet, Theo. B. Kegelman, Clerk and Registrar; A. A. Lydecker, Inspector.

Hampton, Hunterdon county; population, 914. W. Frank Fritts, President; Robert C. Thomson, James Splane, Thomas J. Raber, Clerk and Registrar; Dr. T. B. Fulper, Inspector.

Harrington Park, Bergen county; population, 377. C. Enshaw Cooper, President; Carl Johnson, Chancellor; J. Martin, Secretary and Acting Treasurer; J. Frank Hallenbeck, Registrar; Chas. A. Richardson, M. D.; Gustave Osterberg, Inspectors.

*Harvey Cedars, Ocean county; population, 33. J. L. Fenimore, Registrar.

Hasbrouck Heights, Bergen county; population, 2,155. Howard B. VanNote, President; Anthony F. Moran, Edbert L. Tenney, Wm. J. Schweickert, Clerk and Registrar; Dr. S. V. Morris, Health Officer; Duncan M. Davidson, Inspector.

Haworth, Bergen county; population, 588. George A. Hurd, President; A. Martenot, E. T. Hendrickson, Matthias Dieck, Henry F. Copeland, Secretary and Registrar.

*Hawthorne, Passaic county; population, 3,400. John A. Shea, Registrar.

Helmetta, Middlesex county; population, 661. James Deming, President; John Hysore, Andrew York, Cinton M. Clemons, Robert J. Franklin, Clerk; Edward M. Clemons, Registrar; Dr. J. C. Shinn, Inspector.

High Bridge, Hunterdon county; population, 1,545. John L. Phillips, President; Ambrose Conover, Samuel Tait, Clerk; A. S. Hummell, Registrar. Edmund Eastwood, Inspector.

*Highland Park, Middlesex county; population, 1,517. Wm. H. Holman, Clerk and Registrar.

Highlands, Monmouth county; population, 1,386. Frank Gerbrach, President; Wm. Hennessey, V. H. Havens, Samuel Foster, John L. Oppermann, M. D.; Calvin Parker, Clerk and Registrar; Samuel Strauss, Inspector.

*No report received.

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Hightstown, Mercer county; population, 1,879. Wm. F. Lott, President; A. V. Dawes, R. R. Forman, D. H. Cunningham, J. V. Davison, F. V. Jamison, Registrar; A. V. Pierson, Clerk and Inspector.

Hohokus, Bergen county. population, 488. —— Howland, President; Geo. Pinckney, E. D. Adamy, A. H. Alfast, E. F. Keller, Secretary; Dr. Chas. W. Harreys, Inspector, Ridgewood.

Hopatcong, Sussex county; population, 146. T. R. Atterbury, President; Hudson Maxim, Alva Nelson, Richard Voorhees, John P. Muller, David W. King, Clerk and Registrar; Otto Rafer, Inspector.

Hopewell, Mercor county; population, 1,073. Robert P. Miller, M. D., President; John H. Merz, Joseph B. Hill, Fred I. Sutphen, Robert Zulauf, D.D.S., Clerk and Registrar.

Island Heights, Ocean county; population, 313. H. H. Davis, President. A. W. Atkinson, Robert T. Patterson, H. C. Lippincott, James Forester, W. T. McKaig, Clerk and Registrar.

Jamesburg, Middlesex county; population, 2,075. Geo. A. Schultze, President; John A. Thompson, Paul S. Davison, James B. Pownall, Wm. S. Hankins, Clerk; J. L. Suydam, Medical Inspector.

Kenilworth, Union county; population 779. Henry L. Finkle, President; Louis Socofsky, C. C. Wilber, E. Fuller, E. F. Stevens, Clerk; Chas. Knudson, Registrar.

Keyport, Monmouth county; population, 3,582. Gustave Maurer, President; A. S. Van Buskirk, D. E. Roberts, M. D., S. Frank Mason, B. B. Huylar, C. F. Tuthill, Clerk and Registrar; H. W. Hartman, M. D., Inspector.

Lavallette, Ocean county; population, 42. Charles J. Smith, President and Inspector; Charles Garibaldi, Joseph Patterson, N. Joseph Englebert, Clerk, Registrar and Inspector.

Leonia, Bergen county; population, 1,486. Henry R. Goesser, President; Frederick Ellerbrook, H. M. Thompson, Clerk and Registrar; J. T. Wyckoff, M. D., C. W. Mooney, A. D. Bogert, Inspector.

Linden, Union county; population, 610. H. B. Hardenburg, President; Wm. McDonagh, Philetus Smith, J. L. Neubauer, J. F. Watson, W. M. Watson, Wm. McDonagh, Jr., Clarence H. Smith, Clerk and Registrar.

***Linwood, Atlantic county;** population, 602. James Farish, Secretary and Registrar.

Little Ferry, Bergen county; population, 2,541. Thomas Stika, President; William H. Sall, August Fickle, Louis Brauer, Clerk and Registrar; Otto Schulz, Inspector.

Lodi, Bergen county; population, 4,138. John W. Lane, President; Joseph Mullane, Peter De Vries, Adrian Dausen, Jacob Van Hook, Clerk and Registrar; Henry H. Brevoort, M. D., Tunis Looy, Inspectors.

Longport, Atlantic county; population, 118. William S. Gilmore, President and Registrar; Bolton E. Steelman, H. DeC. Hamilton, E. Fullerton Cook, Secretary; Michael McCoy, Inspector.

Madison, Morris county. population, 4,658. W. H. Barton, President; E. P. Holden, F. H. Seward, J. C. Humbert, J. H. McGraw, S. Fred Burnet, Registrar and Inspector.

Manasquan, Monmouth county; population, 1,582 D. Randolph Cook, President; R. B. Campbell, Alonzo Mount, Robert M. Marks, Registrar; Wm. A. Morton, Inspector.

***Matawan, Monmouth county;** population, 1,646. Wm. Rodgers, Clerk, Registrar and Inspector.

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*No report received.

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Maywood, Bergen county; population, 889. Henry Heck, President; J. M. Masters, Otto B. Hartwich, J. W. Norton, Dr. Frank Freeland, N. B. Beam, G. M. Fetzer, Clerk and Registrar; Richard H. L. Osthoff, Inspector.

Mendham, Morris county; population, 1,129. George S. De Groot, President. Dean Sage, E. L. Garabrant, G. S. Thompson, Edson J. Rood, Clerk.

Merchantville, Camden county; population, 1,996. J. E. Van Kirk, President; John V. Garrison, A. H. Moses, Thomas Hill, Dr. J. Lawrence, W. B. Stewart, Clerk and Registrar; Wm. Linderman, Inspector.

***Metuchen, Middlesex county;** population, 2,138 R. B. Crowell, Registrar.

Midland Park, Bergen county; population, 2,001. C. P. Morgan, President; Charles C. Mastin, August H. Wostbrock, Theodore Maybe, Henry Amos, Wm. J. Ryans, Clerk and Registrar; Dr. Joseph Payne, Inspector.

Milford, Hunterdon county; population, ——. Wm. R. Sailer, President; John Giles, James Holden, Frank P. Vanderbilt, Registrar; A. Arling Hiel, Inspector.

Millstone, Somerset county; population, 157. E. M. Davis, Registrar.

Milltown, Middlesex county; population, 1,584. Wm. Kuhlthan, Jr., President. Chas. C. Richter, John Dow, R. A. Paterson, Adam Wagner, Milton Brindle, Clerk; Robert Harkins, Registrar; N. Nes. Forney, M. D., Inspector.

Monmouth Beach, Monmouth county; population, 485. William N. Ferguson, President; Chas. A. Valentine, Herbert Vreeland, Richard West, Clerk.

Montvale, Bergen county; population, 522. Jesse V. De Groff, President; Daniel H. Atkins, George H. Ihnen, Rudolph Ludwig, William B. Lawson, Clerk and Registrar.

Moonachie, Bergen county; population, 638. Frantz Guettler, President; Charles Maire, Christian Ullmann, Charles H. Koster, Clerk and Registrar. Pius Kruter, Inspector.

Mountainside, Union county; population, 362. William Brown, President; Aaron T. Hageman, Alfred E. Pearsall, Robert Laing, Secretary and Registrar; August Schwartz, Inspector.

Mount Arlington, Morris county; population, 277. R. J. Chaplin, President; P. S. Dver. F. L. Schafer, Dr. C. D. Gordon, James Levie, Clerk and Inspector; C. E. Cook, Registrar; F. H. Tappan, F. L. Schafer, Inspector.

Mount Tabor, Norris county population, ——. H. A. Chamberlain, Clerk.

National Park, Gloucester county; population, 325. P. B. Milligan, President. Oscar H. Duer, John L. Williams, Sr., Ruth Clement, M. D., William E. Beers, Clerk and Registrar.

Neptune City, Monmouth county; population, 488. George M. Hurley, President; Derry Dennison, Edwin Tucker, Charles Brown, Miles Allgor, Sharon F. Smith, Clerk and Registrar; Wm. S Bennett, Inspector.

Netcong, Morris county; population, 1,532. John Grogan, President; John Miller, M. D., John Keneally, Francis Jones, T. H. Mahony, Secretary; J. P. Meade, Registrar.

New Providence, Union county; population, 873. Edward T. Nelson, President; Horace B. Guerin, John E. Parker, Frederick Wirsching, William Woodruff, Clerk and Registrar.

***North Arlington, Bergen county.** population, 437. John H. Shields. Clerk and Registrar.

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* No report receivd.

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North Caldwell, Essex county; population, 595. Wm. Kusmaul, President; Thos. C. Sanderson, Henry Schauz, Wm. Little, Thos. H. Peer, Secretary; D. Bond, Inspector.

North Haledon, Passaic county; population, 749. Wm. Clowes, President; Wm. J. Ellis, Chas. E. Ellis, Joseph Graham, Emil Miller, Thos. F. Lord, Edward Watson, Samuel Clowes, Clerk and Registrar; A. A. Lydecker, M. D., Inspector.

North Plainfield, Somerset county; population, 6,117. Andrew E. Kenny, President. C. H. Rugg, J. V. Vanderhoof, A. E. Giddes, A. H. Dundon, M. D., Registrar; J L. Ollif, Inspector.

***North Wildwood, Cape May county;** population, 833. Chas. G. Glenn, Secretary.

Norwood, Bergen county; population, 564. Albert Murberg, President; William Harra, Chas. Vnold, Michael Brady, Frederick Hafforn, John Gates, Clerk and Registrar.

***Oakland, Bergen county;** population, 568. Allen S. Page, Secretary.

Oaklyn, Camden county; population, 653. Wm. Luick, President; Emil C. Hessert, George Karl, George Bossler, Wm. F. Schaffer, Richard D. Early, Clerk and Registrar.

Ocean Grove, Monmouth county; population, ——. A. E. Ballard, President; Wm. Wardell, E. N. Cole, Henry Wheeler, H. B. Alday, M. D., Clerk, Registrar and Inspector.

Old Tappan, Bergen county; population, 305. J. D. Bogert, C. V. Gifford, Wm. Blauvelt, C. B. Haring, Charles DeWolf, Clerk and Registrar.

Palisades Park, Bergen county; population, 1,411. Harry E. Clark, President; Dr. J. S. Van Dyke, Louis Quad, Rollo Steenland, Wm. Sehner, W. G. Stevens, Clerk and Registrar.

Park Ridge, Bergen county; population, 1,401. Martin Verbeyst, President; Dr. J. A. Moenig, Dr. S. Alexander, W. D. Woodley, A. P. Post, T. G. Forbes, Clerk and Registrar; Geo. F. Shafer, Inspector.

Paulsboro, Gloucester county; population, 2,121. William F. Gainer, President; William Hancock, George K. C. West, Jacob Ballinger, Clerk and Registrar; R. H. Reeves, M. D., Inspector.

Peapack-Gladstone, Somerset county; population, ——. C. R. Kay, M. D., President; Rev. J. M. Harper, Wm. D. Vanderbeek, Wm. H. Horton, F. H. Ludlow, Clerk and Registrar.

Pemberton, Burlington county; population, 797. Anthony J. Morris, J. G. Montgomery, John B. Nutt, J. H. Kelsey, President; J. Newton Clevenger, Joseph O. Jones, J. J. Brander, Clerk and Registrar.

Pennington, Mercer county; population, 722. Dr. Edgar Hart, President; George W. Snook, William Trudel, Chas. M. Titus, Frank A. Blackwell, Charles M. Titus, Clerk and Registrar; Frank A. Blackwell, Inspector.

Penns Grove, Salem county; population, 2,118. Dr. N. H. Barnart, President; A. H. Green, S. R. Leap, R. F. Shannon, R. F. Willis, Registrar.

Pitman, Gloucester county; population, 1,950. Marshall F. Lummis, M. D., President and Registrar; A. S. Clark, D. H. Shock, Arthur Bell, Ben F. Moore, Ben. F. Mattson.

Pleasantville, Atlantic county; population, 4,390. H. C. Thomas, President; Chas. Shewell, Frank Reinier, Wm. H. Anderson, William Reed, Thomas F. Crawford, Clerk and Registrar; Dr. H. L. Harley, Inspector.

Point Pleasant Beach, Ocean county; population, 4,390. Charles W. Dampman, President; Charles B. Imlay, Joseph Elberson, J. Edward Harvey, H. C. Shoemaker, Jr., Clerk, Registrar and Inspector.

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*No report received.

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Pompton Lakes, Passaic county; population, 1,060. Linn S. Abbott, President; Charles W. Lindsley, C. C. Wickstead, Geo. V. Sheffield, John E. Shuyler, H. L. Wells, Clerk and Registrar; Dr. George B. Gale, Inspector.

***Princeton, Mercer county;** population, 5,136. W. C. C. Zapf, Clerk and Registrar.

Prospect Park, Passaic county; population, 2,719. George Boer, President; Alfred McAuley, Henry W. F. Woudenberg, John Crawford, Lambertus Touw, Clerk and Registrar; Abraham A. Lydecker.

Ramsey, Bergen county; population, 1667. O. O. Clark, President; William J. Boyce, Otto G. Feist, G. Edward Kiaser, Daniel S. Wanamaker, Clerk and Registrar; Raymond A. Kiefer, M. D., Inspector.

***Red Bank, Monmouth county;** population, 7,398. Howard S. Higginson, Clerk and Registrar.

***Ridgefield, Bergen county;** population, 966. R. K. Dyas, Clerk and Registrar.

***Riverside, Bergen county;** population, 736. A. J. Scrivens, President; James E. Sims, H. Gaber, E. N. Crandell, Wm. V. Light, Clerk; Joseph Weston, Registrar; Geo. L. Shafer, Inspector.

Riverton, Burlington county; population, 1,788. E. C. Stoughton, President; C. A. Wright, James Cunningham, Samuel W. Collin, D. D. S., Dr. Chas. S. Mills, Clerk and Inspector; Charles G. Davis, Registrar.

Rockaway, Morris county; population, 1,902. Wm. A. Matthews, President; T. B. Davey, J. M. Nichols, Leonard Hough, Clarence Beach, Edward Ehlers, Edward Roegner, Wm. A. Parliman, Clerk and Registrar; Charles H. Hull, Inspector.

Rocky Hill, Somerset county; population, 502. Wm. N. Stults, President; Dr. M. Reeve, A. E. Haynes, R. M. Avery, C. R. Baldwin, Clerk and Registrar; Geo. Ellingham, Inspector.

***Roosevelt, Middlesex county;** population, 5,786. R. Joseph Murphy, Clerk.

***Roseland, Essex county;** population, 486. E. R. Youngeman, Secretary.

Roselle, Union county; population, 2,725. John I. Howe, President; C. P. Higgins, H. C. Pierson, M. D., G. W. Strickland, M. D., A. A. Pope, E. S. Waller, J. D. Cooper, Secretary and Registrar; Wm. Morris, Inspector.

Roselle Park, Union county; population, 3,138. H. Edwin Tolman, President; Henry M. Bangert, Percy Whitney, F. Halstead Brown, Edward J. Klein, Clerk and Registrar; William H. Morris, Inspector.

Rumson, Monmouth county; population, 1,449. Geo. E. Harvey, President; Dr. G. G. Ward, Geo. E. Seaman, Inspector; William H. Pearsall, Clerk; V. A. Ligier, Registrar.

Rutherford, Bergen county; population, 7,045. Dr. Charles Calhoun, President; Chas. R. Hunt, Geo. F. Schermerhorn, F. W. Fleming, J. C. Sares, H. Y. Blakiston, Secretary and Registrar; Geo. K. Thomas, Inspector.

Saddle River, Bergen county; popuation, 483. Robert T. Wilson, President; R. A. Adams, John G. Ackerman, J. W. Woodruff, Geo. M. Eckert, James L. Ackerman, Clerk and Registrar; A. Van Nostrand, Inspector.

Seabright, Monmouth county; population, 1,220. David H. Karp, President; Ed. Pannaci, Nathaniel Jhanes, Chas. S. Smith, Clerk and Registrar; Larry Fichter, Inspector.

Sea Side Park, Ocean county; population, 101. Chas. S. Harker, M. D., President: Chas. B. Coles, Henry Clayton, L. J. Stone, G. H. Thacher, Clerk and Registrar.

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*No report received.

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Secaucus, Hudson county; population, 4,740. Thos. C. Sproul, President; A. Hornung, A. Kohl, Louis G. Asmussen, Clerk.

Somerville, Somerset county; population, 5,060. Dr. A. L. Stillwell, President; Dr. Thomas H. Flynn, John B. Osbourn, Daniel H. Beekman, Wm. R. Sutphen, Clerk and Registrar; Geo. D. Totten, Inspector.

South Bound Brook, Somerset county; population, 1,024. Wm. T. Morecraft, President; E. B. Randolph, E. D. Latourette, James P. Hoffman, Clerk and Registrar.

***South Cape May, Cape May county;** population, 7. James Ritchie, Mayor.

South River, Middlesex county; population, 4,772. P. W. Radcliffe, President; Charles Anderson, Asher Bissett, Jesse Selover, Clerk and Inspector; John Van Norden, Registrar.

***Spotswood, Middlesex county;** population, 623. George W. De Voe, Registrar.

Spring Lake, Monmouth county; population, 853. S. R. Knight, President; E. W. Remsen, Ed. White, J. G. Newman, D. H. Hills, Clerk and Registrar.

Stanhope, Sussex county; population, 1,031. M. K. Salmon, President; John Wills, L. K. Wood, R. S. Slaght, John McMichael, J. J. Shaw, Clerk.

Stockton, Hunterdon county; population, 605. P. A. Shepherd, President; Chas. A. Smith, J. Harvey Snider, Harry H. Moore, John S. Wilson, Clerk; P. E. Rockafellow, Registrar.

***Surf City, Ocean county;** population, 40.

Sussex, Sussex county; population, 1,212. H. D. Van Gaasbeck, M. D., President; J. L. McCoy, V. S., S. F. Quince, Moses Green, H. E. Wells, Clerk and Registrar; Moses Green, Inspector.

Swedesboro, Gloucester county; population, 1,477. Dr. J. G. Halsey, President; H. H. Sparks, J. G. Costello, W. H. Rieger, Clerk and Registrar; Dr. T. B. Turner, Inspector.

Tenafly, Bergen county; population, 2,756. Dr. J. J. Haring, President; Richard Delehanty, Herman D. Heusel, D. J. MacKellar, Clerk; Dr. J. B. W. Lansing, Registrar and Inspector.

Totowa, Passaic county; population, 1,130. John Raupp, President; Joseph Boyle, Eugene Luttringer, Peter Touw, Jr., Frank Atkins, Clerk and Registrar; Chas. A. Keating, M. D., Inspector.

Tuckerton, Ocean county; population, 1,268. Theophilus P. Price, President; J. W. Kelley, Anson J. Rider, Benjamin F. Riley, Nathan Atkinson, Clerk.

Upper Saddle River, Bergen county; population, 273. James D. Carlough, President; August Weiss, Carl Ibsen, A. A. Zabriskie, Borough Clerk; Henry Zabriskie, Secretary and Registrar.

Verona, Essex county; population, 1,675. W. Pitt Rich, President; Louis C. Miller, W. A. Schneider, Judson W. Parker, I. H. Allen, Louis C. Miller, Clerk; Chas. S. Simonson, Registrar; Chester H. Wells, Inspector.

Vineland, Cumberland county; population, 5,282. Ferdinand Koetz, President; J. C. Barretta, Burley Ayres, Winfield Walls, Geo. W. Lamb, Clerk and Registrar; J. W. Winslow, W. H. Blake, W. J. Large, Inspector; C. P. Brewer, Solicitor.

***Wallington, Bergen county;** population, 3,448. James Brennan, Secretary and Registrar.

***Washington, Warren county;** population, 3,567. A. J. Craft, Clerk and Registrar.

Wenonah, Gloucester county; population, 645. William C. Cattell, President; George L. Dilks, Hamilton Turner, Grover C. Rechman, Jesse

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W. English, Clerk and Registrar; Harry A. Stout, M. D., Joseph S. Chew, Inspector.

West Caldwell, Essex county; population, 494. George M. Canfield, President; Marcus S. Crane, Frederick A. Baldwin, Joseph Beach, Theodore M. Gray, Clerk; Herbert Francisco, Registrar; E. E. Peck, M. D., Inspector.

West Cape May, Cape May county; population, 844. W. H. Smith, President; D. E. Stevens, E. G. Roseman, S. M. Taylor, F. R. Hughes, M. D., Clerk.

***West Long Branch, Monmouth county;** population, 879. R. R. Hughes, Clerk.

Westwood, Bergen county; population, 1,870. George J. Scott, President; A. E. Willenbacker, W. Hengstenburg, W. C. Demarest, G. M. Levitus, N. Cleveland, Clerk and Registrar; T. E. Townsend.

Wharton, Morris county; population, 2,983. John H. Williams, President; Dr. H. W. Kice, J. J. Langdon, John McDonald, John A. Bermingham, Clerk; William H. Force, Registrar.

***Wildwood, Cape May county;** population, 898. Henry Coombs, Clerk and Registrar.

Wildwood Crest, Cape May county; population, 103. Richard R. Scampton, President; Leslie Hallen, Wm. A. Justice, Treasurer; E. B. Fagan, Clerk and Registrar; Thos. Cross, Inspector.

Woodbine, Cape May county; population, 2,399. N. Rigberg, President; P. Horenstein, J. Sabsin, R. Reiner, Jos. Goodman, D. H. Rosenfeld, Clerk and Registrar; R. Zehmeyer, Inspector.

***Woodcliff, Bergen county;** population, 470. G. J. Wortendyke, Clerk and Registrar.

Woodlynne, Camden county; population, 500. Alfred Heppard, President; Albert Sinloch, Thomas Wilson, Jr., Christian Dupont, Registrar; C. W. Davis, D. Wills, Inspector.

Wood Ridge, Bergen county; population, 1,043. Seymore, B. Aimes, President; Julius Doerflinger, Isaac Holmes, Ernest Schnetter, Joseph F. Beck, Clerk and Registrar.

Woodstown, Salem county; population, 1,613. Henry V. Foster, E. P. McGeorge, M. D., Wm. Coleman, R. E. Corson, Wm. B. Foster, Clerk and Registrar; F. P. Vanlier, Dr. L. D. Horner, Inspector.

TOWNS.

Belvidere, Warren county; population, 1,764. Dr. F. P. Lefferts, President; Samuel J. Hixson, William Widenor, George Latteman, George H. Weaver, Clerk and Inspector.

Bloomfield, Essex county; population, 15,070. James J. Thompson, President; William R. Ritscher, Seymour P. Gilbert, Jacob Wolfe, M. D., Joseph Charles, Dr. Joseph C. Saile, Clerk, Registrar and Inspector.

***Boonton, Morris county;** population, 4,930. Frank N. Banta, Clerk and Registrar.

Dover, Morris county; population, 7,468. Dr. A. J. Carroll, President; Dr. A. W. Condict, Wm. G. Hummell, Registrar; E. J. Reiderer, Wm. H. Tonking, Clerk; John G. Taylor, Health Officer.

Freehold, Monmouth county; population, 3,233. E. D. Clayton, President; S. L. Bennett, Dr. H. S. Brown, Charles V. Du Bois, Wm. A. Barkalow, Alonzo White, Alonzo Brower, Clerk

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*No report received.

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Guttenberg, Hudson county; population, 5,647. F. H. Rademaker, President; F. Brunner, Joseph A. Hurley, Henry Walser, Joseph Hitchler, W. G. Langenhop, Clerk.

Hackensack, Bergen county; population, 14,050. Alfred F. Holly, President; A. A. Altschuler, H. C. Humphrey, E. B. Walden, Alfred Powless, Robt. T. Blake, R. H. Yereance, E. M. Johnson, Clerk; Dr. F. S. Hallett, Health Officer; Dr. Geo. Finke, Asst. Health Officer; Robert Ballagh, Plumbing Inspector; A. H. G. Maidment, Counsel.

Hackettstown, Warren county; population, 2,715. Geo. W. Smith, President; A. E. Martin, M. D., Jesse Smith, Robert V. Kinsey, A. G. Boettiger, Clerk and Registrar; A. G. Clark, Inspector.

Hammonton, Atlantic county; population, 5,088. John A. Hoyle, President; John Walther, R. G. Scudder, Clayton R. Scullen, Joseph S. Mart, Dr. Jos. C. Bitler, Clerk and Registrar; Dr. Chas. Cunningham, Inspector.

Harrison, Hudson county; population, 14,498. James T. Malone, President; Dr. Henry Allers, Nathaniel T. Comey, Jos. F. Lynch, Dr. H. E. Sterns, Lawrence S. Fagan, Clerk; John T. McClure, Health Officer.

Irvington, Essex county; population, 11,877. Jonah Hardgrove, President; Julius Bartosch, Hugo R. Winkler, Benj. Camp, Albert Mittinmeyer, Edwin Berry, Clerk; Jos. K. Clickenger, Inspector.

Kearny, Hudson county; population, 18,659. Frank Odendahl, President; Vevin Kennedy, Robt. V. England, Wm. H. Anderson, Geo. McAfee, A. O. Bornemann, Clerk; Chas. Schiller, Registrar; Henry V. Amerman, Inspector.

***Keyport, Monmouth county;** population, 3,554. Charles F. Tuthill, Clerk and Registrar.

Montclair, Essex county; population, 21,550. M. N. Baker, President; Seward Davis, Dr. Levi W. Halsey, Dr. J. T. Hanan, Treasurer; Ed. Winslow, Secretary; C. H. Wells, Registrar; Frank J. Osborne and R. Huttenloch, Inspectors.

Morristown, Morris county; population, 12,507. John R. Burr, President; Robert C. Caskey, Samuel C. Haven, M. D., James J. Lyons, Dr. Francis H. Glazebrook, Registrar; Robert S. Van Dyke, Inspector; John J. Belbey, Plumbing Inspector.

Newton, Sussex county; population, 4,467. Dr. Warren H. Smith, President; James A. Vaughan, William Townsend, H. D. Couse, A. V. B. Mackerley, Secretary and Registrar; Ross McPeek, Inspector.

Nutley, Essex county; population, 6.009. J. L. Miller, President; R. W. Booth, Dr. E. P. Whelan, Joseph Lamb, William De Vausey, Geo. Hawksworth, Secretary and Registrar; E. E. Farth, Inspector.

Phillipsburg, Warren county; population, 13,903. P. Frank Hagerty, President; Daniel Zeigler, Nicholas F. Pines, Michael T. Lynch, Francis Coyne, Frank Kneedler, Clerk and Registrar; Howard R. Carey, Inspector; Dr. Alma Williston, E. L. Smith, Attorney.

***Raritan, Somerset county;** population, 3,672. J. J. Bourke, Clerk and Registrar.

Town of Union, Hudson county; population, 21,023. Frederick Zapp, President; John Weil, Emil Maisner, M. D., Wm. Riesenberger, Joseph Syfel, Richard Specker, Clerk; Chas. Steller, Grant P. Curtis, M. D., Inspector.

Westfield, Union county; population, 6,420. Joseph M. Harrison, M. D., President; George L. Delatour, H. H. Zutler, D. V. S., C. W. Harden, George S. Laird, M. D., C. W. Harden, Clerk and Registrar; Andrew J. Carney, Jr., Inspector.

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*No report received.

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West Hoboken, Hudson county; population, 35,403. L. A. Menegaux, President; Louis C. Lange, M. D., Mario Niccoline, Henry Burstyn, Walter McK. Hillas, Geo. E. Bangs, Clerk and Registrar; Frank A. Frederick, Health Officer; Charles Weller.

***West New York, Hudson county;** population, 13,560. Harry Kuhlke, Clerk.

West Orange, Essex county; population, 10,980. Charles A. Heim, President; Carl E. Stanton, Morris Farkas, M. D., Charles Dignum, Henry J. Feindt, Ditlow Schroll, Jr., Clerk and Registrar; Dr. James M. Maghee, Inspector; Jos. Flemming, Plumbing Inspector.

VILLAGES.

Ridgefield Park, Bergen county; population, ——. John H. Ficken, President; Joseph Fletcher, B. B. Stern, J. F. Camp, Geo. H. Rowland, Howard B. Ficken, Clerk and Registrar; C. A. Know, M. D., Inspector; Geo. F. Shafer, Plumbing Inspector.

Ridgewood, Bergen county; population, 5,416. Edward S. White, President; Dr. Wm. L. Vroom, E. S. Brower, Robert W. Muns, John Harmon, Clarence A. Demarest, Clerk; Wilbur Morris, Registrar; Robert B. Murphy, Inspector; Dr. H. H. Pettit, Health Officer.

South Orange, Essex county; population, 11,869. Mefford Runyon, M. D., President; Richard D. Freeman, M. D., Vice-President; Edwin S. Allen, Edward Loomis, Tom Watkins, J. Budd Smith, Secretary; A. C. Benedict, Registrar and Inspector.

TOWNSHIPS.

Acquackanonk, Passaic county; population, 11,869. Richard Berry, President, Clifton; Geo. F. Schmidt, Clifton; Eugene F. Piaget, Great Notch; James Marsh, Lake View; Henry Frederick, Delawanna; Frank Wilkinson, Clifton; Edo. M. Yearance, Clerk, Clifton; Richard Berry, Registrar, Clifton; James F. Sutton, Inspector.

Alexandria, Hunterdon county; population, 1,045. William V. Bloom, President, Little York; Walton Martin, Mount Pleasant; Jos. Hoff, Everittstown; John C. Wilson, Clerk, Everittstown; Dr. F. S. Grim, Inspector, Baptisttown.

Allamuchy, Warren county; population, 642. Jacob D. Roe, President; Wm. Grover, John S. Till, Clerk; John Willson, Jr., Inspector, all of Allamuchy; Dr. L. Cook Osmun, Hackettstown.

***Alloway, Salem county;** population, 1,533. William E. Simkins, Clerk and Registrar, Elmer, R. F. D.

Andover, Sussex county; population, 521. Wm. M. Slater, President; Clark N. Kinneg, R. D. No. 3; Henry Harden, Warren H. Smith, William Iliff, Clerk and Registrar; Warren H. Smith, Inspector, all of Newton.

***Atlantic, Monmouth county;** population, 1,205. Frank E. Heyer, Registrar and Inspector, Colts Neck.

***Bass River, Burlington county;** population, 685. Jos. B. Lamson, Clerk, New Gretna.

Bedminster, Somerset county; population, 2,375. Charles Wood, President, Pluckamin; Geo. E. Crater, Gladstone; F. P. Crater, Gladstone; John Bodine, Clerk, Gladstone; M. C. Smalley, M. D., Gladstone; C. R. Kay, Peapack; J. M. Beekman, Bedminster.

Belleville, Essex county; population, 9,891. Dr. Herbert B. Vail, Presi-

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dent; George F. Thornton, Vice-President; Henry J. Mason, John F. Flanagan, Jeraldo Marioran, John H. Coeyman, Clerk and Registrar; W. Brand Smith, all of Belleville.

Berkeley, Ocean county; population, 597. Benjamin F. Butler, President,, Bayville; Stout R. Johnson, Toms River; William Britton, Jr., Bayville; Devine Butler, Registrar, Bayville; O. A. Wood, M. D., Inspector, Forked River; Marcus B. Allen, Clerk, Bayville.

Berlin, Camden county; population, 1,611. W. C. Raughley, President; R. Kinhue, J. S. Adams, West Berlin; X. F. Ottiger, Clerk and Registrar; Dr. F. O. Stern, Inspector, all of Berlin.

Bernards, Somerset county; population, 4,608. Grant B. Schey, President; Henry Scheuerman, Frank B. Allen, Fred G. Ballentine, David Buist, J. E. Buck, Clerk and Registrar; Dr. F. C. Sutphen, Inspector.

Bethlehem, Hunterdon county; population, 980. John W. Yauger, President; Charles Hoppock, Vice-President; Nelson Bowlby, Chairman; Wm. C. Riddle, Secretary.

Beverly, Burlington county; population, 2,337. H. K. Cramp, President; John Thornton, J. R. Maul, G. E. Harbert, M. D., Jos. B. Carter, Clerk and Registrar.

Blairstown, Warren county; population, 1,718. Isaiah Lance, President; L. Milton Wilson, Emmet J. Hoff, Jos. A. Dugan, Clerk and Registrar; Dr. H. O. Carhart, Inspector.

***Boonton, Morris county;** population, 428. Edmund H. Stickle, Clerk and Registrar.

Bordentown, Burlington county; population, 608. Dr. C. D. Mendanhall, President; Samuel Johnson, W. W. Dawson, J. H. Colkett, Dr. Hugh Le Jambre, Clerk, Registrar and Inspector.

Branchburg, Somerset county; population, 970. S. S. Opie, President; Tunis Ten Eyck, Wm. Jelliffe, Augustus McCullough, Registrar; Henry V. Davis, Inspector.

***Brick, Ocean county;** population, 2,177. John A. Dorsett, Clerk and Registrar.

Bridgewater, Somerset county; population, 1,742. J. Albert Schneider, President; Chas. T. Smith, Peter Gulick, John Slattery, Clerk and Registrar; Dr. Benj. F. Seaman, Inspector.

Buena Vista, Atlantic county; population, 2,723. Alfred Pennock, Sr., President, Registrar and Inspector; Harry Brown, John Yost, Jr., Arthur C. Daggett, Douglas Reed, Clerk.

Burlington, Burlington county; population, 1,220. Harry H. Mattson, President; Ellis C. Parker, Fred Shedaker, Thos. B. Gandy, Clerk, Registrar and Inspector.

Byram, Sussex county; population, 1,055. Franklin G. Colby, President; A. L. Cassedy, Hiram Stone, John Miller, M. D., Geo. M. Prickett, Clerk and Registrar.

Caldwell, Essex county; population, 704. Henry Myers, President; Austin M. Speer, Edward Sisco, Edward E. Peck, M.D., Theodore Vincent, Assessor and Clerk.

***Cedar Grove, Essex county;** population, 2,409. H. B. Whitehorne, M. D., Clerk.

Centre, Camden county; population, 3,200. Frank M. La Pierre, President; Samuel J. Rowand, Joseph E. Haines, John H. Jackson, Clerk and Registrar; Dr. Leslie C. Lyon, Inspector.

Chatham, Morris county; population, 812. Edw. W. Blazier, President; Louis A. Noe, Charles A. Johnson, C. W. Scarborough, M. D., J. H. Bebout, Clerk and Registrar.

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Chester, Burlington county; population, 5,069. William B. Lippincott, President; Edward H. Cutler, David R. Lippincott, Thomas Gehring, Chas. H. Dudley, Dr. F. G. Stroud, Secretary; George W. Heaton, Registrar; Frank G. Stroud, M. D., Inspector.

Chester, Morris county; population, 1,251. John W. Rourk, President; Chas. B. Pitney, Wm. S. Howell, Chas. Rinehart, Clerk and Registrar; Dr. Harris Day, Inspector.

Chesterfield, Burlington county; population, 1,130. Chas. M. Bunting, President; Aaron E. Johnson, Wright Longstreet, Wm. Wallace, Registrar.

Cinnaminson, Burlington county; population, 1,266. Clayton Conrow, President; Benjamin Lippincott, John L. Schmierer, George C. Frank, Clerk; Thomas E. Steel, Assessor and Registrar; Dr. J. D. Janney, Inspector.

Clark, Union county; population, 469. Isaac Terhune, President; George Holland, Henry Sheifelstien, Wm. J. Thompson, Clerk; Wm. Cladek, M. D., Inspector.

Clementon, Camden county; population, 2,794. Wm. A. Wilson, President; R. J. Lippencott, T. Fox, Geo. W. Evans, Clerk and Registrar; Dr. Frank B. Cook, Inspector.

Clinton, Hunterdon county; population, 2,108. John Shurts, President; John Godown, Geo. B. Rinehart, B. B. Berkaw, Clerk and Registrar; C. G. Boyer, Inspector.

Commercial, Cumberland county; population, 2,604. L. F. Shropshire, President; Harrison Hollinger, Claude Bateman, Walter C. Riggin, Clerk and Registrar; Joseph N. Fowler, Inspector.

Cranbury, Middlesex county; population, 1,424. Walter Scott, President; Joseph C. Chamberlin, John V. B. Wyckoff, A. M. Davison, Clerk and Registrar.

Cranford, Union county; population, 3,641. John W. Heins, President; F. P. Ryan, W. Scholes, C. W. Burtis, S. R. Droescher, Alfred H. Miller, Clerk; F. R. Swackhammer, Registrar; J. L. Vail, M. D., Inspector.

***Deerfield, Cumberland county;** population, 3,311. H. L. Cooper, M. D., Clerk, Newfield.

Delaware, Camden county; population, 1,706. Wm. Graff, President and Registrar; Joseph Hinchman, J. Watson Mallack, Thomas Biedeman, W. B. Jennings, Clerk and Inspector.

Delaware, Hunterdon county; population, 1,740. George H. Higgins, President; W. R. Stevenson, Wm. L. Dobbins, Harry Johnson, Clerk and Registrar; Dr. George N. Best, Inspector.

Delran, Burlington county; population, 1,031. Edward H. Haines, President; Samuel R. Caldwell, Wm. F. Krauder, George Friday, Clerk and Registrar.

***Dennis, Cape May county;** population, 1,751. I. S. Townsend, Clerk and Registrar, Clermont.

Deptford, Gloucester county; population, 2,524. John Mayhew, President; R. Cooper Budeman, Oscar Stern, Carroll C. Headly, Clerk, Registrar and Inspector.

Dover, Ocean county; population, 2,452. Lucian Gravatt, President and Registrar; Anthony A. Dunham, J. C. McClenahan, John Post, Jr., John A. Ernst, Clerk; Frank Brouwer, M. D., Inspector.

Downe, Cumberland county; population, 1,519. A. B. Campbell, President; A. P. Hickman, John Gaskill, Sheppard Campbell, Registrar; Dr. G. E. James, Inspector.

Eagleswood, Ocean county; population, 550. Oscar C. Cranmer, President; John A. Shinn, Jonathan Cox, Dr. Chas. H. Conover, Philip R. Sprague, Clerk.

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Easthampton, Burlington county; population, 508. Geo. E. Butler, President; S. P. Comegy, Isaac Brown, Johnson Oatman, Clerk; Dr. R. C. Barrington, Inspector.

East Amwell, Hunterdon county; population, 1,203. D. S. Lowe, President; Geo. Hartpence, Abram Polhemus, John J. Horn, Clerk and Registrar; Dr. P. C. Young, Inspector.

***East Brunswick, Middlesex county;** population, 1,602. Henry Warnsdorfer, Clerk and Registrar.

East Greenwich, Gloucester county; population, 1,406. William Cook, President; Samuel Stetser, William Dauson, J. C. Dauson, Clerk.

East Windsor, Mercer county; population, 941. Chas. S. Lee, President; H. R. Applegate, R. H. Ely, S. L. Mount, Clerk and Registrar; Dr. C. M. Franklyn, Inspector.

Eatontown, Monmouth county; population, 2,076. S. S. Stout, President; H. W. Conrow, Wm. Darby, Raymond Van Keuren, Clerk; A. L. Cowles, Registrar; Dr. J. C. Rush, Inspector.

Egg Harbor, Atlantic county; population, 1,110. R. H. Sheele, President; J. H. Smith, Franz Boehly, Wm. Hauenstein, Clerk and Registrar; Ernest Zille, Inspector.

Elk, Gloucester county; population, 1,022. Edward Miller, President; Thomas Hann, Richard Gant, Samuel L. Seran, Clerk; Mortimer Duffield, Inspector.

Elsinboro, Salem county; population, 419. J. L. Smith, President; Richard Hancock, Edward Parkell, Franklin T. Ayares, Clerk; Wm. D. Griscom, Registrar.

Evesham, Burlington county; population, 1,408. William Dunphey, President; Amos Wills, Elmer Read, Benj. K. Brick, Secretary; W. F. Powell, Registrar.

Ewing, Mercer county; population, 1,889. J. L. Knight, President; Wm. S. Morris, Wm. C. Cook, Wallace Lanning, Clerk; Dr. E. B. Allen.

Fairfield, Cumberland county; population, 1,629. James B. Mulford, President and Registrar; E. W. Trenchard, Geo. B. Williams, E. Coates Sering, Chas. H. Nichols, Clerk; Harry E. Lore, Inspector.

Fanwood, Union county; population, 1,616. Ira G. Walker, President; Henry C. Meyer, Samuel Hetfield, George H. Johnston, Clerk; Dr. F. W. Wescott, Inspector.

Florence, Burlington county; population, 4,731. Wm. Wilson, President; Louis Gray, Lambert Rainear, Wm. Makeed, Chester Emmons, Chas. B. Green, Clerk; Byron Carty, Registrar; David Baird, Jr., M. D., Inspector.

Frankford, Sussex county; population, 1,004. Victor Compton, President; Geo. B. Gitman, Frank H. Marlatt, Dr. H. E. Riddel, J. W. Fountain, Clerk; Daniel Dalrymple, Registrar.

***Franklin, Bergen county;** population, 1,954. Daniel Snyder, Clerk and Registrar, Midland Park.

Franklin, Gloucester county; population, 2,603. J. L. Downe, President; Thos. McArthur, Rev. Chas. Ewain, Chas. H. Lincoln, Registrar.

Franklin, Hunterdon county; population, 1,099. Burris Snyder, President; John W. Rinehart, John W. Snyder, Elwood Nixon, Clerk and Registrar; Dr. Q. E. Snyder.

Franklin, Somerset county; population, 2,395. Elias Baker, President; William B. Voorhees, L. V. Suydam, Cornelius Cadmus, Clerk and Registrar; Dr. J. H. Cooper, Inspector.

Franklin, Warren county; population, 1,585. Walter B. Godfrey, Presi-

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dent; Harvey F. Cole, James H. Shipman, E. H. Moore, M. D., Charles H. Hoagland, Clerk.

Fredon, Sussex county; population, 457. William Roy, President; A. C. Smook, Peter E. Garris, E. W. Landis, M. D., Clerk; W. N. Westbrook, Registrar.

***Freehold, Monmouth county;** population, 2,329. R. V. Lawrence, Clerk and Registrar.

Frelinghuysen, Warren county; population, ——. A. L. Cook, President; James Toomath, A. N. Wildrick, J. E. Bowman, Clerk and Registrar; Dr. Fred Rorbach, Inspector.

***Galloway, Atlantic county;** population, 1,976. Charles F. Stuckel, Registrar.

Glassboro, Gloucester county; population, 2,821. L. N. Shreve, President; J. H. Shute, G. M. Keebler, J. R. Helm, Clerk; Wm. Martin, Inspector.

Gloucester, Camden county; population, 2,380. Charles Fell, President; Clarence Blackwood, James Zane, Albert E. Batten, Clerk and Registrar; Dr. J. Anson Smith, Inspector.

Green, Sussex county; population, 888. D. H. Longcor, President; E. E. Cooper, S. S. Coleman, I. L. Labar, Clerk and Registrar; J. C. Clark, Inspector.

***Greenwich, Cumberland county;** population, 1,145. J. W. Butler, Clerk.

***Greenwich, Gloucester county;** population, 874. Jacob Allen, Registrar.

Greenwich, Warren county; population, 904. George E. Hamlen, President; Jacob Rush, Lewis D. Heller, F. W. Curtis, M. D., William Sherrer, Clerk.

Haddon, Camden county; population, 1,465. Alfred M. Matthews, President; Albert J. Cline, Harry E. Locke, James St. C. Williams, Clerk and Registrar; Dr. E. B. Rogers, Inspector.

Hamilton, Atlantic county; population, 2,271. John E. Iszard, President; Chas. D. Makepeace, Harrison A. Wilson, Harry Jenkins, Thompson G. Hoover, Clerk; Henry C. James, Health Officer.

***Hamilton, Mercer county;** population, 7,899. John R. Caldwell, Clerk, Trenton.

Hampton, Sussex county; population, 671. Isaac D. Williams, President; Simeon Yetta, J. A. Sigler, J. W. Thompson, Clerk; H. E. Riddell, M. D., Inspector.

Hanover, Morris county; population, 6,228. Harrison D. Mead, President; Edward Connelly, Judd Condit, John Gagenheimer, Dr. R. V. D. Totten, Wm. B. Davis, Clerk, Registrar and Inspector.

Hardwick, Warren county; population, 405. Isaac J. Konkle, President; Jacob Bugle, Hiram France, Marcus C. Hill, Clerk and Registrar; Dr. H. O. Carhart, Inspector.

Hardyston, Sussex county; population, 5,210. James McCue, President; R. L. Edsall, E. D. Shuster, Smith Simpson, Clerk and Registrar; E. P. Uptegrove, Inspector.

***Harmony, Warren county;** population, 1,490. Freeman Schuler, Registrar, Phillipsburg, R. F. D. No. 2.

Harrington, Bergen county; population, 588. Arnold Kober, Clerk and Registrar; Charles F. Semino, President; N. Herring, James Muzzio.

Harrison, Gloucester county; population, 1,682. W. R. Skinner, President; Jacob Kier, I. S. White, S. F. Ashcraft, M. D., Eli Heritage, Registrar.

Hillsborough, Somerset county; population, 2,313. John V M. Sut-

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phin, President; Henry Sebring, Cornelius Conover, J. E. Anderson, M. D., Clerk; Henry S. Van Nuys, Jr., Registrar and Inspector.

Hillsdale, Bergen county; population, 1,072. Albert Mohnking, President; John H. Westphal, William Simmons, Albert L. Fritz, Clerk; George R. Stegman, Registrar; Dr. George M. Levitas, Health Officer.

Hohokus, Bergen county; population, 1,881. Frank J. Dater, President; J. C. Straut, Charles D. Vanderbeck, Albert Winter, Clerk and Registrar; Dr. C. P. De Yoe, Inspector.

Holland, Hunterdon county; population, 1,699. George N. Becker, President; Stewart Burgstresser, John L. Crouse, H. B. Vansyckel, Clerk and Registrar; A. Arling Heil, M. D., Inspector.

***Holmdel, Monmouth county;** population, 1,058. Wm. A. Ackerson, Clerk and Registrar.

Hope, Warren county; population, 1,119. I. B. Hopkins, President; Clark Wilson, Robert Harris, C. S. Bartow, Clerk and Registrar; Dr. Walter Storm, Inspector.

Hopewell, Cumberland county; population, 1,818. B. Frank Sharp, President; E. G. Ayars, D. D. Davis, C. E. Bowen, Clerk.

Hopewell, Mercer county; population, 3,171. Joseph R. Burroughs, President; Isaac B. Scudder, Peter O. Voorhees, Chas. H. Hart, Clerk and Registrar; Dr. J. W. Richards, Inspector.

Howell, Monmouth county; population, 2,703. Walter Havens, M. D., President and Inspector; B. M. Cooper, Robert H. Morris, Chas. E. Ferry, James H. Butcher, Clerk and Registrar.

***Hudson county;** population, 537,231. James S. Lynch, Secretary.

Independence, Warren county; population, 867. W. H. McCormick, President; A. B. Leigh, John Lommason, E. Y. Williams, Registrar; F. W. Haggerty, M. D., Clerk.

***Jackson, Ocean county;** population, 1,325 Geo. C. Hankins, Clerk.

Jefferson, Morris county; population, 1,303. Joseph Pettinger, President; Edgar McCormack, Horace L. Cook, Charles Chamberlain, Clerk and Registrar; Dr. Joseph R. Riggs, Inspector.

Kingwood, Hunterdon county; population, 1,265. Rentan Heath, President; Stanford Vanderbelt, Preston S. Emmons, Samuel J. Snyder, Registrar; Frank S. Grim, Inspector.

Knowlton, Warren county; population, 1,556. Oscar Smith, President; Edward Dutt, Frank Clifton, W. B. Gilbert, Clerk and Registrar.

Lacey, Ocean county; population, 602. Dr. G. E. Wallace, President and Inspector. George W. Frazee, A. H. Grant, Wm. R. Holmes, B. F. Mathews, Clerk, Registrar and Assessor.

Lafayette, Sussex county; population, 683. Edward Ackerson, President; John D. Ackerson, Jacob S. Losey, William S. Vought, Clerk and Registrar.

Lakewood, Ocean county; population, 5,149. H. J. Tatnell, President; Clayton Hurley, John Sherman, Michaell McGreary, Harry Terwilliger, Registrar; George Hurlbert, Clerk; A. M. Heron, M. D., Health Officer.

Landis, Cumberland county; population, 6,435. Dr. L. F. Hatch, President; Jacob Simonson, Alex. Huston, Joseph Scull, Peter Berti, James Tarbotton, Robert E. Chalmers, Registrar and Clerk; Dr. Chas. E. Gray, Herbert Mason, Inspectors.

Lawrence, Cumberland county; population, 1,746. Ernest L. Mulford, President; David W. Sheppard, Chas. S. Stevens, Louis M. Hoaglim, Clerk; Furman B. Sheppard, Registrar; E. B. Peace, M. D., Inspector.

Lawrence, Mercer county; population, 2,522. Jasper R. Maple, Presi-

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dent; John E. Gorden, Patrick Donnelly, Dr. E. K. Fee, Frank Pierson, Registrar and Inspector.

Lebanon, Hunterdon county; population, 2,179. Jacob N. Alpaugh, P.esident; J. Frank Lance, Peter C. Castner, G. H. Castner, Clerk and Registrar; Dr. Edgar Hunt, Inspector.

Linden, Union county; population, 1,988. John P. Winans, President; John E. Tucker, John S. Mesler, George W. Bauer, George McGillvray, Jr., Frank B. Stimson, Clerk and Registrar; George S. Everett, Inspector.

Little Egg Harbor, Ocean county; population, 388. Ayer Parker, President; Wm. Sheck, Dr. Chas. H. Conover, Henry Gifford, Morris L. Parker, Clerk; Millard F. Parker, Registrar.

Little Falls, Passaic county; population, 3,750. Eugene Shori, President; Alfred Halsy, David Hawthorne, Fred Hennri, Chas. Barth, Wm. M. Zeliff, Clerk and Registrar; Warren H. Young, Inspector.

Livingston, Essex county; population, 1,025. Frederick M. Hoffman, President; Sidney B. Winans, Gottleb Ochs, E. E. Burnet, Clerk and Registrar; Dr. D. J. Edwards, Inspector.

Lodi, Bergen county; population, 693. Frank Kotlaba, President; John Turick, Jr., Chas. Kinzley, John Clausen, Jr., Registrar.

Logan, Gloucester county; population, 1,523. Wilbur F. Beckett, President; Wm. F. Justice, Charles Lamson, S. B. Platt, Clerk and Registrar; P. E. Stillwagon.

***Long Beach, Ocean county;** population, 107. Chas. E. Sherborne, Clerk.

***Lopatcong, Warren county;** population, 766. Frank Cline, Registrar.

Lower, Cape May county; population, 1,188. John C. Elliott, President; J. Durell Hoffman, George Dickenson, Dr. W. A. Lake, J. Hollis Hoffman, Clerk and Registrar; Dr. W. A. Lake, Inspector.

Lower Alloways Creek, Salem county; population, 1,252. Albert M. Carll, President; Thomas S. Nixon, Lewis F. Smith, Edward Hancock, Registrar; F. B. Harris, M. D.

Lower Penns Neck, Salem county; population, 1,544. Hnace Jaquett, Sr., President; Chas. Bright, Sr., David Dixon, Ellsworth L. Irelan, Clerk and Registrar.

Lumberton, Burlington county; population, 1,768. Wm. A. Jones, J. C. Walters, A. Engle Harris, Dr. E. D. Prickitt, M. D., E. C. Davis, Clerk, Registrar and Inspector.

***Madison, Middlesex county;** population, 1,621. D. H. Brown, Registrar.

Manalapan, Monmouth county; population, 1,375. Edward Hendrickson, President; Joseph C. Sutphen, William C. Hartshorne, A. T. Applegate, M. D., Garret B. Conover, Clerk; W. Denise Herbert, Registrar.

Manchester, Ocean county; population, 1,112. E. F. Larrabee, President; C. S. Rhoads, P. Christofferson, Harold Pittis, M. D., Clerk and Inspector; Amos Bozarth, Registrar.

***Mannington, Salem county;** population, 1,606. Jonathan B. Grier, Clerk and Registrar.

Mansfield, Burlington county; population, 1,526. A. H. Patterson, M. D., President and Inspector; Frank B. Haines, Wm. R. Sharp, Elmer L. Tallman, Joseph H. Armstrong, Clerk and Registrar.

***Mansfield, Warren county;** population, 1,238. John C. Beatty, Clerk and Registrar.

Mantua, Gloucester county; population, 1,529. Isaac C. Dilks, President; John S. Kincard, Edward Kean, William S. Hurff, Registrar; E. Z. Hillegass, Inspector.

***Marlboro, Monmouth county;** population, 1,754. J. D. Ely, M. D., Clerk.

Matawan, Monmouth county; population, 1,472. Jacob Meinzer, Presi-

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Plumstead, Ocean county; population, 1,123. C. W. Hopkins, President; James Larkin, Dayton Hopkins, George Hartshorn, Clerk and Registrar; Dr. W. J. Bickler, Inspector.

***Pochatcong, Warren county;** population, 3,202. W. I. Jacoby, Clerk and Registrar.

***Pompton, Passaic county;** population, 4,044. J. C. Beam, Clerk and Registrar.

Princeton, Mercer county; population, 1,178. Dr. Elston H. Bergen, President and Inspector; James Margerum, Charles McCarty, William J. Leigh, Lewis Anderson, Paxson Stryker, Clerk and Register.

Quinton, Salem county; population, 1,091. Wm. Radel, President; A. S. Patrick, Aaron D. Harris, Joseph Powell, Clerk; Andrew S. Harris, Registrar; Dr. Frank B. Husted, Inspector.

Randolph, Morris county; population, 2,307. John Pugsley, President; William J. Curnow, George W. Lauterman, Richard L. Cook, M. D., Ellison Coe, Clerk and Registrar.

Raritan, Hunterdon county; population, 1,310. John B. Rockafellow, President; Joseph Bodine, Joel Hellyer, Theo. H. Dilts, Clerk and Registrar; George Henry, M. D., Inspector.

Raritan, Middlesex county; population, 2,707. Wm. R. Drake, President; Edward Pfeiffer, Peter S. Meeker, Wm. T. Woerner, Clerk.

Raritan, Monmouth county; population, 1,583. J. L. T. Webster, President; Robert Brown, Charles Carr, P. O. Weigand, D. Edgar Roberts, M. D., Herman L. Lehr, Clerk, Registrar and Inspector.

Readington, Hunterdon county; population, 2,569. D. H. Miller, President; Calvin C. Huff, Silas Schomp, F. L. Johnson, M. D., Wm. T. Hoffman, Clerk and Registrar.

Riverside, Burlington county; population, 4,011. Jacob Theurer, President; J. Taylor Neal, William Mathias, Chas. Heiss, Clerk and Registrar; Dr. C. B. Lambert, Inspector.

Rivervale, Bergen county; population, 450. E. A. Havers, President; Julius Kessler, Ellis Collignon, M. J. Ford, Clerk and Registrar; Dr. G. M. Levitas, Inspector.

Rockaway, Morris county; population, 4,835. James Arthur, President; Calvin Lawrence, Sidney F. Cook, Daniel J. Howard, John Cox, James Lash, Clerk and Registrar.

Roxbury, Morris county; population, 2,414. Theodore F. King, President; Chas. I. King, Frank I. Davis, Edward W. Kilpatrick, Clerk; Dr. Harvey Upchurch, Inspector.

Saddle River, Bergen county; population, ——. Adam Hopper, President; Otto P. Pehle, Theodore Chamberlain, Isaac A. Hopper, Clerk and Registrar; Dr. Van Deebeck, Inspector.

Sandyston, Sussex county; population, 855. Ira Stoll, President; Daniel M. Johnson, George Silverthorne, A. A. Runsom, Clerk; W. H. Vansickle, Registrar.

Sayreville, Middlesex county; population, 5,783. August Rohde, President; Joseph Allgair, Wm. Burke, Dr. J. H. Beekman, Thos. Creamer, Clerk and Registrar; Henry Boyler, Inspector.

***Shamong, Burlington county;** population, 483. J. W. B. Jennings, Assessor, Indian Mills.

Shrewsbury, Monmouth county; population, 3,238. Abram T. Bennett, President and Registrar; Aaron Armstrong, John C. Crawford, Elias S. Black, Raymond Doughty, Clerk; Dr. Robert Dickson, Inspector.

Southampton, Burlington county; population, 1,778. John Brushwood,

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President; George W. Elbert, Frank Simons, Charles E. Naylor, Clerk; J. C. Brown, M. D., Inspector.

South Brunswick, Middlesex county; population, 2,443. H. W. Jeffers, President; C. R. Cox, Arthur Turton, Dr. Carroll, Wm. Perkins, Clerk and Registrar.

South Harrison, Glaucester county; population, 694. Clayton G. Kirby, President; George F. Wilkinson, Mathew Allen, D. C. Lippincott, Clerk and Registrar; Samuel F. Ashcraft, Inspector.

South Orange, Essex county; population, 2,979. Charles A. Cross, President; William H. Kemp, William A. Greenaway, Edward R. Arcularius, Clerk; William G. Miller, Registrar; Dr. G. H. Taylor, Health Officer.

***Sparta, Sussex county;** population, 1,579. David F. Kinney, Clerk and Registrar.

Springfield, Burlington county; population, ——. Howard Letts, President; Ezra C. Burr, Harry Applegate, Aaron H. Burtis, Clerk; Dr. Lyman Hollingshead, Inspector.

Springfield, Union county; population, 1,246. Robert Morrison, President; Fred Kenlie, George Parcell, Richard Trioett, Joseph Koch, Lewis L. Terry, Clerk and Registrar; Dr. J. A. Stites, Inspector.

***Stafford, Ocean county;** population, 934. George F. Pharo, Clerk and Registrar.

Stillwater, Sussex county; population, 796. Eugene Huff, President; A. C. Roof, Wm. P. Struble, E. W. Landes, M. D., O. Van Horn, Clerk and Registrar.

Stow Creek, Cumberland county; population, 880. Eric Carlson, President; Albert F. Shimp, Charles Ware, Wm. H. Davis, Clerk.

Tabernacle, Burlington county; population, 487. J. Cooper Haines, President; J. Cooper Crain, Chas. H. Alloway, George H. Wisham, Clerk and Assessor.

Teaneck, Bergen county; population, 2,082. Robert Shaw, President; John Brower, J. E. Pearce, George V. Demarest, David Beck, Peter I. Ackerman, Clerk, Registrar and Inspector.

Tewksbury, Hunterdon county; population, 1,742. L. M. Hoffman, President; J. J. Neff, F. L. Lindabury, Hezekiah Philhower, Clerk and Registrar; F. A. Apgar, Inspector.

Union, Bergen county; population, 4,076. Arthur A. Clay, President; Charles Rehnoldt, George Smith, Dr. John W. Clarke, Chas. J. Rodgers, Clerk and Registrar; Joseph E. Harris, Inspector.

Union, Hunterdon county; population, 930. Godfrey Emery, President; Archie E. Cregar, Wm. Best, Morris Stockton, Clerk and Registrar; A. J. Hahn, M. D., Inspector.

Union, Ocean county; population, 982. John W. Chew, President; J. Howard Perrine, Morton W. Cross, R. F. Elberson, Clerk and Registrar; Dr. Howard Conover.

Union, Union county; population, 3,419. Howard B. Kline, President; D. H. Beach, Gottleib Schmable, D. Hobart Sayre, Clerk and Registrar.

Upper, Cape May county; population, 1,483. Harry Young, President; James Smith, Z. A. Townsend, Jesse T. Young, Clerk; Smoers C. G. Stephens, Registrar; Randolph Marshall, Inspector.

Upper Freehold, Monmouth county; population, 2,053. Isaac S. Dawes, President; John W. Havens, John C. Johnston, F. C. Price, M. D., Clerk and Inspector; Wm. Quicksell, Assessor.

Upper Penns Neck, Salem county; population, 744. Joseph E. Clark,

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President; David Wright, Nathan Mattson, Willard Layton, Clerk and Registrar.

Upper Pittsgrove, Salem county; population, 1,754. William F. Mayhew, President; Charles Driver, Walter Lawrence, Geo. W. Fitch, M. D., R. A. Robinson, Registrar.

Vernon, Sussex county; population, 1,675. S. B. Garlinghouse, President; C. L. Giveans, N. P. Ryerson, Registrar; W. D. Parker, Clerk; E. P. Uptegrove, M. D., Inspector.

***Voorhees, Camden county;** population, 1,174. S. H. Gardiner, Clerk and Registrar.

Wall, Monmouth county; population, 3,817. Joseph H. Brown, President; Dr. W. W. Trout, E. C. White, S. Bartley Pearce, Geo. E. Rogers, Clerk, Registrar and Inspector.

Walpack, Sussex county; population, 286. Eugene Rosenkrans, President; Lester J. Fuller, Emmet Struble, J. W. Bunnell, Clerk and Assessor.

Wantage, Sussex county; population, 2,077. Frank Middaugh, President; Frank Coe, Walter J. Hait, James Wilson, S. M. Parcell, Clerk and Registrar; H. D. Van Gasbeck, Inspector.

***Warren, Somerset county;** population, 1,036. E. E. Sage, Clerk, Registrar and Inspector, Plainfield, R. F. D. No. 3.

***Washington, Bergen county;** population, 100. Paul C. Schultz, Registrar, Westwood, R. F. D. No. 2.

Washington, Burlington county; population, 597. Thos. K. Sooy, President; Julius Gerber, James M. Crowley, A. E. Koster, Assessor; Dr. Theo. Boyson, Inspector.

Washington, Gloucester county; population, 1,396. August Theis, Jr., President; G. R. Hurff, Chas. D. Nicholson, Clerk and Registrar.

Washington, Mercer county; population, 1,090. C. N. Hutchinson, President and Registrar; Mahlon Mershon, Chas. H. Conover, Chas. Tindall, E. B. Yard, Clerk.

Washington, Morris county; population, 1,900. **Chas. A. Gulick, President;** G. H. Sliker, Clerk and Registrar; Dr. James, Twp. Physician; James Anthony, Inspector.

Washington, Warren county; population, 1,023. William Larison, President; Orin Perry, Daniel M. Wyckoff, Charles B. Smith, Samuel Rinehart, Assessor and Registrar.

Waterford, Camden county; population, 1,484. Bartram Hand, President; Johnson String, Wm. L. Duble, Clerk and Registrar; J. J. Hoverder, Inspector.

Wayne, Passaic county; population, 2,281. Edward Merselis, President; Geo. W. Colfax, Larry Berdan, Dr. Warren H. Young, Thos. D. Ryerson, Clerk and Registrar.

Weehawken, Hudson county; population, 11,228. Charles W. Kugler, President; Thomas L. Anderson, Thomas J. Gallagher, Frank McCort, Henry Shaffer, John M. Hannan, Clerk; Silas W. Platner, Frederick Vincent, Dr. A. E. Fendrichs, Inspector.

***Westhampton, Burlington county;** population, 564. Hudson B. Haines, Clerk and Registrar.

West Amwell, Hunterdon county; population, 866. C. A. Slack, President; C. E. Holcombe, Richard Kunkel, George H. Carr, Clerk and Registrar; F. W. Larrison, Inspector.

West Deptford, Gloucester county; population, 2,057. J. Wilmer Leonard, President; Joseph A. Moore, R. M. Plum, James Carter, Clerk and Registrar; James Hunter, Inspector.

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West Milford, Passaic county; population, 1,967. Walter Vreeland, President; James E. Terhune, Theo. Stickles, Dr. D. E. Drake, John M. Weaver, Clerk and Registrar.

West Windsor, Mercer county; population, 1,342. Jacob R. Wyckoff, President; Walter S. Grover, Hiram Mount, Hiram A. Cook, Clerk; H. J. Coleman, Registrar.

Weymouth, Atlantic county; population, 899. Hope W. Gandy, President; Thomas Bailey, John Farmer, F. R. McKeague, Clerk and Registrar; S. E. Ewing, M. D., Inspector.

Willingboro, Burlington county; population, 562. Joseph Wills, President; J. S. Perkins, Samuel Davis, Howard J. Hart, Registrar.

Winslow, Camden county; population, 2,919. Frederich Priestley, President; Henry Kelling, Frederick Sickler, Joseph H. Graham, Registrar; Dr. C. Cunningham, Inspector.

Woodbridge, Middlesex county; population, 8,948. Lewis E. Potter, President and Registrar; Geo. Brown, Arthur Deter, Howard Pender, Anton Kuhlman, John S. Dooley, Clerk; R. A. Hirner, Inspector.

***Woodland, Burlington county;** population, 475. W. J. Buzby, Clerk.

***Woolwich, Gloucester county;** population, 1,136. C. H. Brown, Secretary.

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